

EXHIBIT O

In the Matter Of:

NEW ENGLAND COMPOUNDING PHARMACY INC. PRODUCTS LIABILITY

VIDEOTAPED DEPOSITION OF ERICH JOACHIMSTHALER

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EXPERT REPORT OF DR. ERICH JOACHIMSTHALER

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Submitted on Behalf of the Plaintiff

For Attorneys Eyes Only

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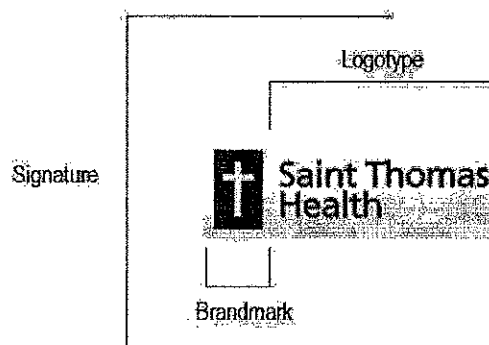
WINNE J. BLAIR, CSR RPR

expression of Christian values, it might also have a self-expressing role for patients who want to demonstrate their religious beliefs.

Brand structure and components

26. Unlike in the origins of branding, today, academics, marketers, advertisers and others refer to brands having two key components: the tangible and the intangible. Tangible brand components, or physical manifestations of a brand, include the name or logotype (the name and style of the written Saint Thomas name in each logo), symbol (e.g. the cross next to the Saint Thomas name), design or brand mark (e.g. the white and blue color combination of the Saint Thomas logo). The name, logotype, designs including color, imagery, typography and composition elements are known together as the brand's signature, visual language or its visual identity¹⁴. For example, for the Saint Thomas entities, the tangible components include the Saint Thomas name, the logo of the white cross on a blue background and other design elements, colors, imagery and typography and composition of these tangible components, that is their placement, organization and arrangement into a unified whole.

Illustrative Components of the Saint Thomas Brand Signature



¹⁴ Wheeler, A., (2012). *Designing Brand Identity: An Essential Guide for the Whole Branding Team*, New York: Wiley & Sons, fourth edition

27. The tangible brand components serve to trigger intangible brand components such as thoughts, images, attributes, feelings, emotions and experiences connected to a brand in consumers' memories. These intangible components give a brand meaning (e.g., trust or assurance) and create economic value. In healthcare services, these intangible components create the promise of the health care provider, the value proposition it delivers to patients. They help new or existing or potential patients make choices. For example, when a consumer seeks information on a new treatment method, seeing a brand such as Saint Thomas Health (i.e. the tangible brand components) can trigger the information that the consumer remembers about that brand. This information may include past experiences with the brand (e.g. from a prior visit of the healthcare provider), information learned through word of mouth or recommendations from others, information remembered from advertisements in either online or offline media, or other information stored in memory such as attributes, feelings, emotions, thoughts or images (i.e., the brand's intangible components).

28. These intangible components are based on certain characteristics such as product scope (e.g., Saint Thomas Outpatient Neurosurgical Center provides treatment for patients affected by neurological conditions), product or service attributes or features (e.g., the Saint Thomas Neurosurgical has a certain number of beds available), quality/value (e.g., Saint Thomas Neurosurgical is known to provide high quality care), uses (e.g., Saint Thomas Neurosurgical performs surgeries), and functional benefits (e.g., Saint Thomas Neurosurgical provides pain relief for patients affected by neurological conditions). Other types of intangible brand components are based on:

- a. User imagery (those to whom the brand is relevant)

- b. Origin and heritage (how the brand started, and the historical associations with the brand)
- c. Organizational associations (the company behind the brand)
- d. Brand personality (any human-like characteristics that are imbued on the brand)
- e. Symbols (anything that represents the brand: a tagline (Nike: Just Do It), a color (McDonald's golden arches), a logo (Disney's scripted logo), a package (the Coke bottle), a musical note (Intel's theme music), product design (Ian Schrager Hotels)).

29. The combination of tangible and intangible brand components creates the brand and makes the brand differentiated and meaningful to consumers. The brand can translate into powerful benefits for consumers. There are three types of benefits that a brand potentially delivers to the consumer, known as the functional benefits (e.g. Saint Thomas Neurosurgical helps me get healthy again), emotional benefits (e.g. going to Saint Thomas makes me feel safe and in control of my health condition) and self-expressive benefits (e.g. choosing the Saint Thomas Neurosurgical for my treatment helps me make a statement that I believe and faith-based care and is an expression of my Christian values).

30. A brand is created by the tangible components, the intangible components and the three benefits. It is precisely how these different characteristics reinforce and link to each other that creates the power of the brand. The combination determines consumer perceptions and, if it is a successful brand, creates perceptions of, for example, quality and value. In other words, what is viewed, how it is viewed, and how the consumer feels about what they have viewed creates the brand.

31. Because of the benefits of brands to consumers, consumers tend to behave in a

positive way towards strong brands. Consumers tend to exhibit (a) a greater willingness to consider the brand's products or services, (b) a greater receptivity to marketing information about a brand's products or services, (c) a stronger desire or aspiration for the brand's products or services, (d) a greater loyalty and willingness to purchase the brand again, (e) a greater tolerance toward the brand in case of product failure or problems, (f) a greater willingness to pay for the brand's products or services, and (g) a greater willingness to recommend the brand to other consumers.

32. Strong brands also have benefits to brand owners. They provide a means of differentiating one product or service from another and a basis for generating preference, choice, and loyalty among consumers. Functionally speaking, products can be quite similar. Take, for example, the cluttered marketplace of the healthcare services industry. From the consumer's perspective, the purpose of a hospital is to provide medical treatment in case of injury or illness. A well-branded hospital, however, has the ability to stand out from the crowd of hospitals, clinics and other choices of healthcare facilities that populate every city. It is the branded aspects of the hospital, all the tangible and intangible components – such as the name, the design of the building, the quality of service, the behavior of staff – that invoke in consumers' memory the distinctive information he or she has stored about the brand.

33. A healthcare provider that has managed to create a powerful brand is Mayo Clinic, an integrated, non-for-profit medical group with sites in Minnesota, Florida, and Arizona.¹⁵ Through delivering a unique customer experience around the Clinic's values "placing the patients' interests above all others" and "teamwork", it has become the number one healthcare

¹⁵ Berry, L.L., Seltman, K.D., (2007). Building a strong services brand: Lessons from Mayo Clinic. *Business Horizons*, 50, 199–209

services brand in the USA. Expecting all employees to act along the lines of the Mayo Clinic Model of care, the Clinic ensures that its values are reflected in the culture patients perceive in all three locations equally. To add to the consistent experience of visiting a Mayo Clinic, all locations have a shared design of buildings (e.g. patient examination rooms) and use the same patient correspondence systems.¹⁶ Thus, Mayo Clinic managed to create a powerful service brand by offering a distinct customer experience and delivering on the brand promise.

34. Another significant benefit of strong brands, especially in service industries, is that they provide the basis for brand extensions, which involves using an existing brand name to introduce new products or services, or geographic expansion. Brand extensions can open new revenue streams by bringing new customers to the brand franchise, increasing market coverage, or differentiating the core brand by new associations. Brand extensions are an important growth strategy in the healthcare services sector. For example, Saint Thomas Health has introduced a brand extension called “Saint Thomas Medical Partners”, which is a network of medical practices in the Middle Tennessee and Southern Kentucky regions.¹⁷ Through this extension, Saint Thomas Health is leveraging the power and regional recognition of the Saint Thomas brand to expand into adjacent areas and reach more customers in the region.

35. In conclusion, a brand is a multi-dimensional construct. There are many elements, tangible and intangible, that can invoke the brand, brand perceptions and associations of the service quality, the trust engendered or encapsulated by the brand or the actual memories a patient has of a prior service experience. The Saint Thomas brand is composed of many brand elements that evoke brand associations which in turn help consumers make choices.

¹⁶ Berry, L.L., Seltman, K.D., (2007). Building a strong services brand: Lessons from Mayo Clinic. *Business Horizons*, 50, 199–209

¹⁷ <http://www.saintthomasdoctors.com/>

How consumers process brands

36. Cognitive psychologists and marketers often conceptualize the storing of brand-related information – that is, the tangible and intangible components of a brand – in consumers’ memories as a network of nodes. The network represents individual, interconnected unitary pieces of information.^{18,19,20} For example, in the McDonald’s memory network on the next page, each word is such an individual piece of information. “Meals” link to the intangible components of “quality”, “service” and “value”. Each node is multi-faceted and can represent many different things such as visual or verbal information. The information can be positively or negatively related to the brand. For example, “meals” links to “quality” and is shown in the figure to be fresh, consistent, hot and good tasting. This node could also link to information that is negative and could say: pre-prepared food, bad tasting. The content, structure and representation of the brand and information about the brand in consumers’ minds are key determinants of the impact on decision-making and choice. The strength of the connections between nodes and the quantity of nodes both determine the salience of a brand. In other words, the salience of McDonald’s is determined by both how likely thinking about a particular node – say, Fries – is to trigger thoughts about the greater McDonald’s brand, and how many nodes exist to trigger thoughts about McDonald’s in totality.²¹ This influences a consumer’s purchase because people often rely on their memory when deciding which product to buy or use.²² As shown in the McDonald’s memory network as well, the name and visual identity is one of the central nodes that links the major associations into a cohesive structure: In the figure, the word McDonald’s and the Golden

¹⁸ Keller, K.L. (1993). Conceptualizing, measuring, and managing customer-based brand equity, *The Journal of Marketing*, 57(1), 1-22.

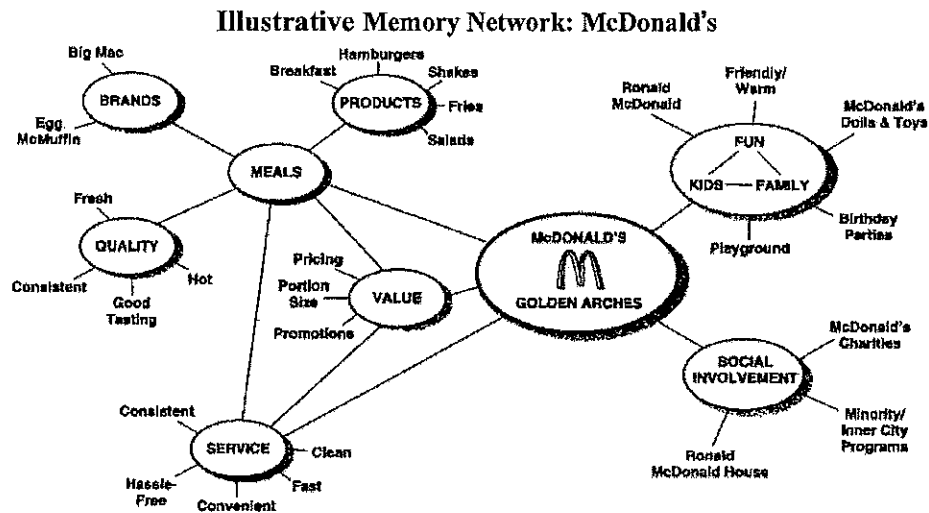
¹⁹ Anderson, J. R. (1996). ACT: A simple theory of complex cognition. *American Psychologist*, 51(4), 355.

²⁰ Anderson, J. R., Bower, G.H., (1973). *Human Associative Memory*. Maryland: VH Winston & Sons

²¹ Romaniuk, J., Sharp, B. (2004). Conceptualizing and measuring brand salience, *Marketing Theory*, 4(4), 327-342

²² Alba, J. W. & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise, *Journal of Consumer Research* 13(4), 411-54.

Arches is the brand signature, which links to all the other major nodes such as value, meals, service, fun, kids and family, and social involvement.²³



37. When the brand-related information comprises associations about a brand such as attributes, feelings or experiences, it is generally believed that the brand name serves as a central node and that name is closely linked to the visual representation of the brand.^{24,25} Applying these principles to the Saint Thomas, it seems that the brand name most likely serves as a central memory node in consumers' minds, which is closely linked to the logo (white cross on blue background). With these brand names as the central nodes, the other supporting elements of the brand provide depth and texture and literally create the Saint Thomas brand, including its visual elements (e.g., the cross logo), intangible brand attributes (e.g., faith-based care), main attributes and benefits (e.g., highly skilled surgeons), experiences with the product whether direct (e.g., receiving medical treatment) or indirect (e.g., word-of-mouth), and other beliefs or feelings about

²³ John, D. R., Loken, B., Kim, K., Monga, A.B., (2006). Brand concept maps: a methodology for identifying brand association networks, *Journal of Marketing Research*, 43(4), 549-563.

²⁴ Keller, K. L. (2008). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*. New Jersey: Prentice Hall, Third Edition

²⁵ Kotler, P., Keller, K.L. (2006). *Marketing Management*. New Jersey: Prentice Hall, Twelfth Edition, pp.198-190.

the brand (e.g., knowledge about how Saint Thomas Health provides high quality care in the Middle Tennessee region). Collectively, these associations create the brand's memory network, also known as the associative memory or knowledge structure in customers' minds. Each of the nodes is linked and connected so that, for example, information about Saint Thomas Neurosurgical invokes memories of the information linked or associated with the Saint Thomas brand overall.

38. The objective of the marketer in building a strong brand is to ensure that the product itself and its visual representation, as well as all the supporting marketing activities are focused on creating and sustaining the associative network in consumers' minds. The marketer seeks to develop strong, favorable and unique associations of brand-related information that become the nodes in the brand's memory network. This will translate into strong and positive perceptions and attitudes toward the brand, creating a strong brand and ultimately a consumer decision-making.

39. In conclusion, it appears that the central node for Saint Thomas in consumers' memory is most likely the Saint Thomas brand name. The central node for Saint Thomas is likely linked with associations about e.g. the hospital building, the community services it provides, or the individual hospitals or medical units. These nodes can further be connected to associations such as "trusted", "safe", or "origin in the city of Nashville." A product or a service from Saint Thomas is likely linked to the Saint Thomas central node, indicating the hierarchical structure of the entities. These connections allow associations about Saint Thomas in general to be shared and transferred between individual Saint Thomas entities.

Customer Decision Journey / Deciders

40. When consumers select a hospital or other healthcare facility, several choice

criteria are affecting their decision. The importance of these criteria varies depending on urgency of treatment and type of treatment or services needed.²⁶ While the criteria discussed in the literature on hospital choice vary, recent literature considers hospitals' reputation, previous experience and perceptions, and cost of care as the leading drivers of choice.²⁷ Hospital brands can have an influence on the consideration of all three of these criteria: A hospital with a good and favorable reputation can be considered to have a strong brand. A strong reputation in healthcare services can be related to, for instance, quality of care, standard of facilities and medical equipment or expertise and behavior of personnel. This reputation is either built through consumers' own experiences or word-of-mouth. As the previous discussion of associative memories demonstrates, strong and favorable brand associations shape the brand and ultimately influence consumer decision making. In line with my discussion on the benefits of strong brands above, it is also apparent that a strong hospital brand can influence a consumer's willingness to pay and thus reduces the role of cost of care in the decision making process.

41. While the patient is the one receiving treatment and experiencing the service, he or she is not the only important decision maker in the choice process for healthcare providers. Apart from the patient, family members, general practitioners and referring doctors, the payer of healthcare such as insurance firms also influence the decision or can even be the sole decision makers^{28,29}. Some studies have highlighted the dominant role of general practitioners and referring doctors in hospital choice.³⁰ Others even suggest that patients generally rely on the

²⁶ Akinci, F., Esatoglu, A.E., Tengilimoglu, T., Parsons, A. (2004). Hospital Choice Factors: A Case Study in Turkey, *Health Marketing Quarterly*, 22(1), 3-19

²⁷ Ibid.

²⁸ Bourlakis, M., Clear, F., Patten, L., (2011). Understanding the UK hospital supply chain in an era of patient choice, *Journal of Marketing Management*, 27(3-4), 401-423

²⁹ Victoor, A., Delnoij, D.M.J., Friele, R.D., Rademakers, J., (2012). Determinants of patient choice of healthcare providers: a scoping review, *BMC Health Services Research*, 12: 272

³⁰ Bourlakis, M., Clear, F., Patten, L., (2011). Understanding the UK hospital supply chain in an era of patient choice, *Journal of Marketing Management*, 27(3-4), 401-423

opinion and hospital suggestion of their general practitioner.³¹ However, the growing market of healthcare services and the availability of information and increasing transparency for patients has increased the patient's role in the decision making process and thus the importance and influence of brand on hospital choice. Patients, due to their lack of expertise to assess the quality of healthcare services (as discussed above), will be more likely to choose strong brands in favor of weak ones.

42. Customer decision-making is generally thought of as consisting of several distinct stages.³² At any stage, it may be necessary to go back to a previous stage and review earlier thinking. The stages in this process are: problem recognition, information search, consideration, evaluation, purchase and post-purchase.

43. The first stage, called problem recognition or need recognition, is the stage in which the consumer first experiences a problem or a need, and realizes that a product of a certain category may be needed.³³ This might be a situation where a consumer realizes he has some medical condition and decides to seek treatment or might have been diagnosed by his general practitioner.

44. The important implication is that the trigger of problem recognition for healthcare services is *not* brand-driven, but rather driven by necessity or purely functional reasons. Seeking healthcare rarely, if ever, is a spontaneous or impulse decision. A customer, in this case a prospective patient, decides to seek medical treatment in a specific facility e.g. in response to particular symptoms he is experiencing or a diagnosis he has received by another doctor. Because healthcare services and medical treatment are an important matter which involves risk and costs,

³¹ Victor, A., Delnoij, D.M.J., Friele, R.D., Rademakers, J., (2012). Determinants of patient choice of healthcare providers: a scoping review, *BMC Health Services Research*, 12: 272

³² Hoyer, W. D., MacInnis, D.J. (2003). *Consumer Behavior*. Boston, MA: Houghton Mifflin, third edition.

³³ Tinson, J. & Nancarrow, C. (2007). Growing up: tweens' involvement in family decision making, *Journal of Consumer Marketing*, S. 160-170.

most consumers are strongly involved, rely on a relatively complex decision-making process and engage in information search.³⁴ This is unlike other categories, such as fashion apparel for example, where consumer demand often is triggered by window shopping which may ultimately lead to impulse buying behavior. While it might not have an impact on problem recognition, brand plays an important role in the following stages of the decision making process.

45. Information search is the stage in which a customer gathers information required to make a decision. The amount of time, research and cognitive effort that gets invested into this and the following stage, arriving at the consideration of a few select providers, depends largely on how urgent the patient needs treatment, how severe the symptoms are and how many providers are available in the catchment area.³⁵

46. Customer involvement with decisions tends to be higher whenever the stakes are high such as when treatment of a serious health condition is needed. This is especially true in the healthcare services sector as a failure of a treatment or low quality of care can have serious consequences for the patient. As mentioned before, the information search normally includes internal information, based on the associations stored in people's memories through past experiences. These experiences are combined with external information from referrals, marketing information, or experiences of other patients available online.

47. When analyzing search efforts for healthcare services, it becomes evident how consumers engage in the processes involving several sources of information. When searching for a hospital or clinic, the customer journey can encompass various physical and digital touch points. The majority of touch points and interactions in the information search for healthcare

³⁴ Tschulin, D. K., Helmig, B.. (1998). The Optimal Design of Hospital Advertising by Means of Conjoint Measurement. *Journal of Advertising Research*, 38(3), 35-46

³⁵ Akinci, F., Esatoglu, A.E., Tengilimoglu, T., Parsons, A. (2004). Hospital Choice Factors: A Case Study in Turkey, *Health Marketing Quarterly*, 22(1), 3-19

providers occurs offline. A study by the Pew Research & California Health Care Foundation reveals that 71% of adults received information from a health professional, while 55% consulted friends or family and 21% sought advice from others suffering from the same health condition the last time they experienced a health issue.³⁶ However, the importance of digital touch points is increasing as more and more patients seek additional information online. The study further shows that of all the internet users who have researched health topics online, 33% have looked for information on hospitals or other medical facilities.³⁷ Thus, the internet has become an important touch point for prospective patients in the decision process for healthcare services.

48. The next stage is called consideration or consideration set formation. Because product or service choice often involves a multitude of alternatives, customers almost always narrow down the set of options or alternatives to a more manageable subset called “the consideration set”, which is the set of options that “the customer considers seriously when making a purchase or consumption decision.”³⁸ Products and services from a company with a strong brand are more likely to be present in the consideration set than otherwise.

49. While consideration sets have been found to contain typically between three and six alternatives across a broad range of product categories in the consumer goods industry (e.g. shampoo) this is much narrower in healthcare services. Generally, it is only after consumers have narrowed down the options to a smaller set that they precede with a more formal evaluation of the options.³⁹ It is therefore extremely important for brand owners that their products or services be

³⁶ Fox, S. (2011). The Social Life of Health Information, Pew Research Center’s Internet & American Life Project & California Health Care Foundation, Washington, D.C.

³⁷ Ibid.

³⁸ Hauser, J.R. Wernerfelt, B. (1990). An Evaluation Cost Model of Consideration Sets. *Journal of Consumer Research*. 16.4, p. 393.

³⁹ Russo, J. E. & Horowitz, A.D. (1994), *Expert Systems for Consumers*. In Behrens, G., K.P. Kaas, B. Neibecker, V. Trommsdorff, and P. Weinberg (eds.), *Konsumentenforschung*, Munich: Verlag-Vahlen, S. 367

Payne, J. W. (1976). *Task complexity and contingent processing in decision making: An information search and protocol analysis*, in: *Organizational behavior and human performance*, 16(2), S. 366-387.

included in this consideration set. If a brand is included in the consideration set, the probability that it will be selected goes up significantly and is more or less inversely proportional to the number of options included in the consideration set. However, if a brand is not included in the consumer's consideration set, its chances of being eventually chosen by the consumer are close to zero.⁴⁰

50. Inclusion in the consideration set is said to be driven by a number of factors. Several studies suggest that liking of objects is influenced by the ease (or difficulty) in processing information relating to the product or brand. This type of consistency plays an integral role in helping consumers narrow down their consideration set.⁴¹ Research shows that consumers tend to buy established brands that invoke the cues or associations of brands that they remember. These cues or associations can stem from information they have heard from others, from advertisements, or from former experiences.⁴² One important factor limiting the size of the consideration set for healthcare providers is the importance of proximity to patients' residence for hospital choice⁴³. However, if a hospital is located in the patient's catchment area, a hospital with a strong brand will more likely be part of the patient's consideration set.

51. Once the consideration set has been formed, the customer proceeds with a more detailed and careful evaluation of the alternatives included in this set.⁴⁴ This is the formal evaluation stage. In this evaluation stage, the options' main attributes and benefits are reviewed and compared, and tradeoffs and decisions have to be made about the relevant importance of each

⁴⁰ Hauser, J. R. (1978). *Testing the accuracy, usefulness, and significance of probabilistic choice models: an information-theoretic approach*, in: *Operations Research*, 26(3), 406-421.

⁴¹ Labroo, A. A. (2006). *Do products smile? When fluency confers liking and enhances purchase intent*, in: *Advances in consumer research*, 33, 558.

⁴² Keller, K. L. (2008). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, Third Edition, Pearson Prentice Hall, Upper Saddle River, New Jersey.

⁴³ Akinci, F., Esatoglu, A.E., Tengilimoglu, T., Parsons, A. (2004). Hospital Choice Factors: A Case Study in Turkey, *Health Marketing Quarterly*, 22(1), 3-19

⁴⁴ Payne, J. W. (1976). *Task complexity and contingent processing in decision making: An information search and protocol analysis*, in: *Organizational behavior and human performance*, 16(2), S. 366-387.

of the attributes. When consumers engage in a complex purchase decision, they generally develop beliefs and attitudes about the brand before making a thoughtful choice to purchase the brand.⁴⁵ Thus, it is extremely important for brand owners to understand the information search and evaluation stages of this behavior type because consumers need assistance to learn about product attributes and benefits and determine which are important to them.⁴⁶

52. The next stage is the purchase or choice stage, which takes into account all information learned during the pre-purchase stage and helps guide customers in making the actual decision. In healthcare services, this is when choice criteria such as hospital reputation, previous experience and perceptions and cost of care are weighted against each other and a patient chooses a facility to seek treatment.

53. The final stage in the customer decision-making process is the post-purchase stage. In this stage, customers experience the product or service and can more fully evaluate its performance. Product or service satisfaction or dissatisfaction and purchase satisfaction or regret may arise as a result. High satisfaction may result in customers telling others about how pleased they are with the product through, for instance, word-of-mouth or online reviews. Strong product dissatisfaction may have similar effects.

54. Again, a strong brand can also play an important role at this stage. As mentioned previously, a strong brand may further motivate the customer to share their experience with others if they are satisfied with the product's or service's performance. A strong brand may also mitigate consumers' negative reactions in case of disappointment.⁴⁷

⁴⁵ Kotler, P. (2003). *Marketing Management*. Upper Saddle River: Prentice Hall, 11th ed, S. 201-202.

⁴⁶ *Ebd.*

⁴⁷ Keller, K. L. (2008). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*. New Jersey: Prentice Hall, Third Edition

55. The decision process outlined is repeated over time as consumers re-enter the problem recognition stage. Hence, for each medical treatment, a patient can enter and follow through the decision making process. In healthcare services, the decision to return to the same healthcare facility will to a large degree depend on their experience and outcome of treatment, as patients form relationships with doctors and develop trust in the facility's quality of service. Thus, associations developed with the brand will have a strong influence on repeat service choice.

56. As discussed in the previous section on associative memory networks, these associations can be transferred to other product brands linked to the experienced brand in a patient's memory network. Thus, these associations can also positively influence the decision making process for another facility from the same brand. If, for instance, a patient has had a favorable experience with Saint Thomas Hospital and has formed brand associations connected to the atmosphere, the quality of care, or the staff, these associations can work in favor of a future decision making process when the same patient is searching for a facility specialized in neurosurgical treatment.

57. Throughout the decision making process, consumers can learn about Saint Thomas in many different ways. In the consideration stage they might retrieve the hospitals available to their memory, while in the evaluation stage they might actively seek information on a certain healthcare provider. In order to understand how brand influences the actual decision making it is necessary to look at the different ways in which consumers process information and evaluate brands.

58. In order to further understand the contextual cueing for brands, it is important to understand how consumers evaluate brands from both a cognitive science or psychology

perspective, as well as a brand and consumer behavior perspective. Daniel Kahneman's theory that separates the human thinking processes into two systems applies. System 1 is the overarching definition of *FAST* thinking, meaning thought processes that make immediate assessments on the perceived world around us. It is working constantly and its workings are relatively effortless and it processes information or cues about a brand with all senses, often without conscious control. In contrast, System 2 is people's rational side, controllable and often associated with a person's true self. System 2 consumes large amounts of cognitive energy; it is *SLOW* and therefore is not suitable to constantly be 'switched on'.⁴⁸

59. Consumers learn about Saint Thomas or any hospital in different ways. They learn intuitively about the brand through getting to know their neighborhood, e.g. after moving to a new city. People learn about certain institutions in their environment quickly, such as the location of schools, city hall, the fire station or hospitals. All of these are essential services that engender a level of trust and are perceived as institutions that are part of consumers' daily lives. This learning process is happening subconsciously. The second way in which consumers learn about a hospital is through recommendation by another doctor or general practitioner or through an actual visit. When doctors recommend patients to visit a Saint Thomas hospital, it has a risk-reducing effect. The patient thus is more likely to trust the brand and then learns about it from subsequent information search (e.g. the website) and the actual experience of the visit.

60. Once they have experienced the brand's services, consumers make choices based on the trust that the facility evokes. They infer this feeling of trust from the facility's local prominence, the doctors, nurses, or the size of the hospital building. All of these elements provide information consumers store in their memories. This information is automatically retrieved in a relevant context, but is not actively thought of. If, for instance, a patient enters Saint Thomas

⁴⁸ Kahneman, D. (2011). *Thinking Fast and Slow*, New York: Farrer Strauss Giroux.

Hospital and then visits Saint Thomas Neurosurgical, he or she automatically experiences and evaluates all the environmental cues of the hospital, the staff, and the building together. He will most likely not perceive the Saint Thomas Neurosurgical and its cues separately and will thus not perceive it as an individual entity. This retrieval of information is thus System 1 mode of thinking in which consumer process all available information subconsciously.

61. However, a patient's information search on his or her own health treatment or specific treatment methods is a process of high involvement. If consumers actively seek information on, for instance, neurosurgical services and actually visit the facility to seek treatment or get a consultation, they focus on the actual core issue (their health state and neurosurgical treatment) and service offering. This process is then System 2 mode of thinking, as it is happening consciously and incorporates a rational evaluation of cues. Hence, when consumers choose a healthcare service provider, the hospital brand and the associations it evokes are processed all together in System 1 mode of thinking. A hospital brand serves as a central node in the memory network and evokes all connected associations.

62. In conclusion, for Saint Thomas Neurosurgical, the linkage to the Saint Thomas name triggers the associations linked to this central node and plays a pivotal role in the evaluation and processing of information. It is very likely that the linkage of 'Saint Thomas Outpatient Neurosurgical Center' to the Saint Thomas brand name and to all other Saint Thomas-branded entities evoke the brand associations in a consumer's memory network through the subconscious and automatic memory process.

II. Brand Portfolio and Brand Architecture

63. This section will describe my analyses of the Saint Thomas brand based on the

theoretical and empirical principles of brand architecture as described in my book *Brand Leadership* which I co-authored with David A. Aaker and elsewhere in the academic and professional literature. I will discuss the building blocks as well as different roles of the brand portfolio and introduce concepts of brand architecture to analyze the Saint Thomas brand portfolio and understand how relationships between the brands and hierarchy levels of the portfolio influence brand perception from a consumer perspective.

Brand Portfolio and Brand Architecture Strategy

64. Many large organizations or institutions such as hospitals have multiple brands that they need to manage. Rather than managing these brands as individual entities, it is advisable to manage these brands as members of a system of brands. Marriott Hotels & Resorts for example links up with JW Marriott, Courtyard by Marriott and Fairfield Inn Marriott. Marriott manages a systems of brands. I have written extensively on this topic, including my books *Brand Leadership: The Next Revolution in Building Strong Brands* and *Hidden in Plain Sight: How to Find your Company's Next Big Growth Strategy*.^{49, 50} Within this system of brands, each brand can be assigned specific roles to reinforce and support one another without causing market confusion. The system itself can serve as a launching platform and filter for when new products or brands are being considered.⁵¹ For example, when Marriott launched a timeshare concept, it called it the Marriott Vacation Club.

65. The brand portfolio defines the scope, breadth and depth of the brands within the brand architecture. It includes all the brands and subbrands attached to product-market offerings. The scope dimension of a brand defines the product categories, subcategories, and markets

⁴⁹ Aaker, D.A., Joachimsthaler, E. (2000). *Brand Leadership*. New York: The Free Press

⁵⁰ Joachimsthaler, E. (2007). *Hidden in Plain Sight*, Harvard Business School Press

⁵¹ Aaker, D.A. (1996). *Building Strong Brands*. New York: The Free Press

covered by the brand's product or service offering⁵². In the case of Saint Thomas Health, the brand scope extends across all types of healthcare related services (general hospital emergency care, specialized inpatient and outpatient treatment, all medical disciplines) in different locations in the Middle Tennessee region.

66. Within the brand portfolio, any product or service offering needs to be identified to customers by a brand name. It must reflect an external view of the brands and define the product from a customer perspective. It is thus necessary to take a look at the main product-defining building blocks, namely, a) master brands, b) endorsers and c) subbrands.⁵³ These different brand types can take on different roles, such as a driver role or a descriptor role. Finally, the relationships between brands are important to understand how consumers perceive a brand offering.

67. A master or parent brand is the primary indicator of the offering or the point of reference. In the brand name and visual identity, it will make up the main part.⁵⁴ The master brand will define the main product scope, such as Toyota is a master brand that defines a line of cars and Holiday Inn is a master brand that defines a line of hotels of the InterContinental Hotels Group. In the case at hand, "Saint Thomas" serves as the master brand that defines a line of healthcare units or services in a specific regional area.

68. Endorser brands provide credibility and substance to an offering. They help affirm that a brand, especially a new brand, will deliver on its brand promise⁵⁵. When Marriott endorses Courtyard for instance, Marriott as an organization implicitly affirms that Courtyard will deliver on its brand promise, even though this is very different from that of Marriott Hotels & Resorts

⁵² Aaker, D.A., (2004). *Brand Portfolio Strategy*, Free Press: New York.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Aaker, D.A., (2004). *Brand Portfolio Strategy*, Free Press: New York.

quality and service levels.⁵⁶ The endorser brand is usually an organizational brand rather than a product brand. Marriott is a product brand for Marriott Hotels & Suites. However, Marriott as an organization is the one endorsing Courtyard. While the endorser can transfer positive associations to the endorsed brand, the endorser can also benefit. For example, endorsing a new, energetic product can enhance the image of the endorser brand.⁵⁷

69. Subbrands are connected to the master brand and can augment the associations of the master brand. The master brand remains the primary frame of reference but may be stretched by the subbrand into a new direction. Subbrands can add associations (Sony Walkman), a brand personality (Audi TT), extend into a new product category (Holiday Inn Express), or energize the master brand (Nike Force).⁵⁸ Subbrands and endorsed brands are important portfolio tools, as they allow brands to be stretched beyond their original product or service offering.⁵⁹ To understand how exactly the subbrand or endorsed brand names function to transfer associations from one brand to another we need to look at the different roles of brands, namely the driver and descriptor roles.

70. Having defined the different portfolio building blocks, we need to look at the portfolio from another angle that clarifies how consumers perceive the entire portfolio as well as the individual brands. That is, what roles do the brand building blocks play in the consumer purchase decision? A driver role describes the extent to which a brand drives the purchase decision and experience. It is the brand most often replayed when asked “What brand did you use?”⁶⁰ The driver brand is the one evoking brand associations in consumers’ minds and has

⁵⁶ Aaker, D.A., Joachimsthaler, E. (2000). The Brand Relationship Spectrum: The Key to the Brand Architecture Challenge, *California Management Review*, 42(4), 8-22

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Aaker, D.A., (2004). *Brand Portfolio Strategy*, Free Press: New York.

⁶⁰ Aaker, D.A., Joachimsthaler, E. (2000). The Brand Relationship Spectrum: The Key to the Brand Architecture Challenge, *California Management Review*, 42(4), 8-22

earned some level of brand loyalty. Typically, the master brand plays a driver role in consumers' purchase decisions, as for instance owners of a Toyota Corolla would say they own a Toyota rather than a Corolla.⁶¹ However, in some cases endorsers can also play a driver role. While the driver brand is the main influencer of the purchase decision, a descriptor merely defines the exact offering and clarifies the product scope of a brand⁶². While subbrands are associated with the master brand and can capture equity (Holiday Inn Express), descriptors only describe what is offered (GE Appliances). There is no brand called 'Appliances', as the term cannot be owned by any one organization. The advantage of a descriptor is that it clarifies the offering, but does not divert consumer focus from the master brand.

71. Looking at the Saint Thomas portfolio, a number of offerings can be identified. As of 2012, "Saint Thomas Health" served as a master brand, as discussed above. In addition, the portfolio today is comprised of nine hospitals (Saint Thomas Midtown Hospital, Saint Thomas West hospital (formerly Saint Thomas Hospital), Saint Thomas Dekalb Hospital, Saint Thomas Hickman Hospital, Saint Thomas Rutherford Hospital, Saint Thomas Highlands Hospital, Saint Thomas, Saint Thomas River Park Hospital, Saint Thomas Stones River Hospital, and Saint Thomas Hospital for Specialty Surgery), as well as Saint Thomas Medical Partners.⁶³ The two additional entities relevant in the case at hand (Saint Thomas Neurosurgical and Saint Thomas Network) do not appear as separate offerings in the publicly available information available today.

72. In 2012, a patient walking into Saint Thomas Neurosurgical would have had numerous opportunities to experience the Saint Thomas brand at multiple physical touch points. Approaching the building of Saint Thomas Hospital, a patient would have first seen the hospital

⁶¹ Aaker, D.A., (2004). *Brand Portfolio Strategy*, Free Press: New York.

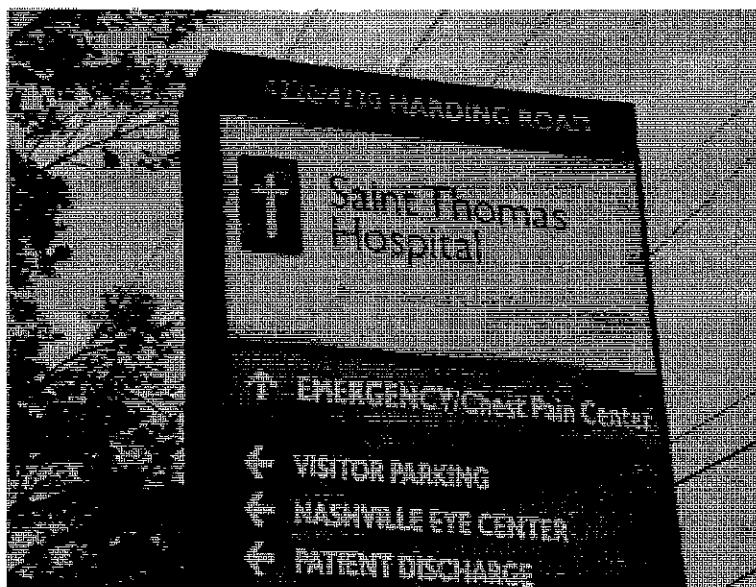
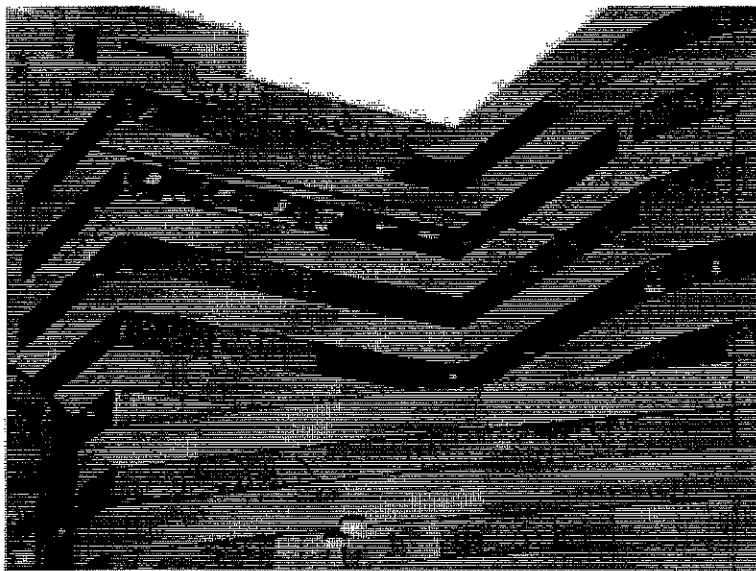
⁶² Aaker, D.A., (2004). *Brand Portfolio Strategy*, Free Press: New York.

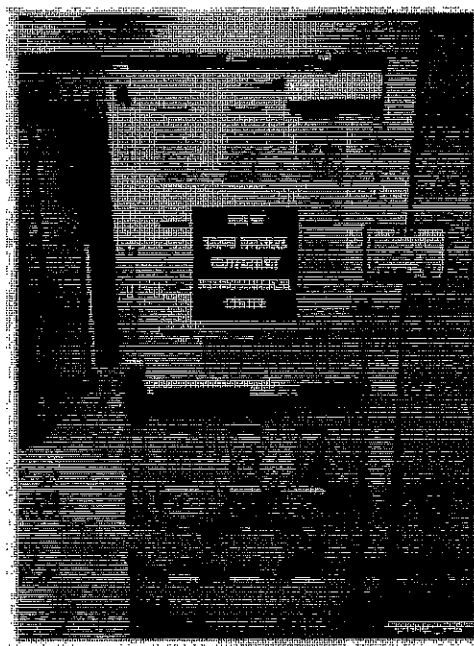
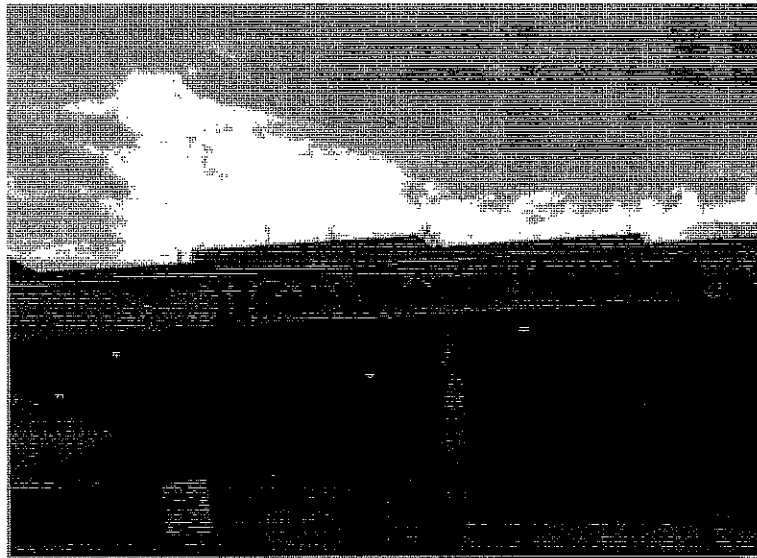
⁶³ www.sths.com/Pages/Hospitals-and-Locations.aspx

building from afar, reading “Saint Thomas” in big letters on the building’s façade. Next, a patient would have driven onto the Saint Thomas Hospital’s campus and firstly seen the signage for direction to the individual facilities around Saint Thomas Hospital. As becomes clear from the signage (as depicted below), the patient is made aware of the fact that he is entering Saint Thomas Hospital. Additionally, he is made aware of the connection between Saint Thomas Hospital and Saint Thomas Health, as some of the signs clearly indicate the Hospital to be “a member of Saint Thomas Health”. Next, the patient would have entered the hospital building, which is also marked with a sign “Saint Thomas Hospital”, including the Saint Thomas brand mark (white cross on blue background). Entering the hospital building, the patient would have further encountered numerous personnel within the hospital, wearing badges of Saint Thomas Hospital. If a patient then would have directed his way to Saint Thomas Neurosurgical, he would have entered the clinic through a door with the sign “Saint Thomas Outpatient Neurosurgical Center”. As made clear in the deposition documents, among the personnel at Saint Thomas Neurosurgical, at least some had name badges identifying them as employees of “Saint Thomas Hospital” or “Saint Thomas”⁶⁴.

⁶⁴ Rudolph Dep. 117:10-21; Saint Thomas Neurosurgical_0502

Images of Saint Thomas Hospital campus in 2012





73. The reconstruction of a patient's journey visiting Saint Thomas Hospital in 2012 makes it clear how he would have experienced the Saint Thomas brand along several physical touch points. The language used on the hospital building, the signage on campus, as well as inside the hospital contributes to the perception of a branded service experience which makes it very likely that a patient would have perceived any services performed within the hospital or

Saint Thomas Neurosurgical to be performed by one single Saint Thomas Entity. The fact that representatives of Saint Thomas believe that patients do not distinguish between Saint Thomas Neurosurgical and the hospital supports this hypothesis.⁶⁵

74. Given the strength of the “Saint Thomas” name within the Nashville healthcare market, it is not surprising that Saint Thomas centered its portfolio of brands on the Saint Thomas name. Today, throughout the portfolio, the naming of offerings is consistently held as a combination of two parts: 1) “Saint Thomas” and 2) the description of the offering. For Saint Thomas Health, the term ‘health’ indicates a general service category, which is in support of its function as a master brand. With respect to the nine hospitals, eight of the offerings indicate the location of the medical unit, as well as the specific offering namely a ‘hospital’ (e.g. Saint Thomas Midtown Hospital is a hospital located in Midtown Nashville). For Saint Thomas Hospital for Specialty Services the second part of the name indicates a more narrow and specialized description of the service offering. Finally, Saint Thomas Medical Partners signals that the service offering is a network of medical service providers (e.g. medical units, individual physicians and doctors, etc.). Looking at the second term in each of the naming of the service offering reveals, that they merely serve as descriptors. None of them could stand alone and be owned as an individual brand, as they either describe a category (‘health’), a location (‘Midtown Hospital’) or a specific service offering (‘hospital for specialty surgeries’). They thus do not hold a driver role, which lies solely with the branded part of the offering, the term ‘Saint Thomas’. It is the term ‘Saint Thomas’ that evokes specific associations of service quality or specific values that differentiate the service from any other hospital or healthcare provider. The naming components are illustrated below.

⁶⁵ Climer Deposition, (STE_MDL_006524)

Illustrative Analysis of Naming Components of the Saint Thomas Portfolio

Master Brand	Business Sector	Location	Offering
Saint Thomas	Health		
Saint Thomas		West	Hospital
Saint Thomas		Midtown	Hospital
Saint Thomas			Hospital for Specialty Surgery
Saint Thomas			Outpatient Neuro-surgical Center
Saint Thomas			Network

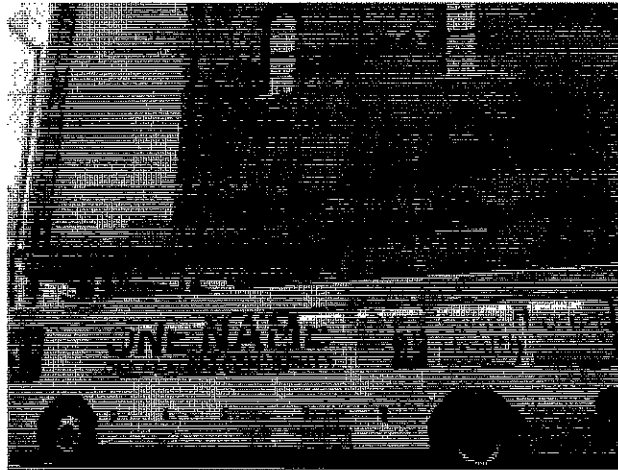
75. The roles identified above are supported by the visual brand identity of the Saint Thomas offerings, i.e. the logo, as 'Saint Thomas' is a consistent of the hospitals' logos (see image below). Analogously, for all offerings, the terms following the name 'Saint Thomas' are visually identifiable as descriptors and play a minor role, if any, in the decision making process. Even though Saint Thomas Hospital was renamed to Saint Thomas Hospital West after the Meningitis outbreak had occurred, the composition of the naming, with 'Saint Thomas' as the branded driver and 'Hospital' as the descriptor, was nearly identical. It can even be argued that the descriptor of the old naming ('Hospital') contained even less of a descriptive function as it lacked the location component, which is included in the new naming ('West Hospital'). Although there are no logos available for the two other entities in question (Saint Thomas Neurosurgical and Saint Thomas Network), the same analysis applies for these two offerings, as the naming composition follows the same logic.

Illustrative Application of Brand Roles to Saint Thomas' Visual Identity



76. As the analysis above demonstrates, the name 'Saint Thomas' serves as a master brand and has a driver role in the portfolio of offerings of the Saint Thomas entities. Thus, the naming strategy clearly signals to consumers that the brands in the portfolio belong together and are offered by the same organization. This linkage is further reflected in Saint Thomas' own marketing materials. As the image below of an advertisement on a Nashville city bus shows, the marketing communication of Saint Thomas Health is drawing particular attention to the common master brand 'Saint Thomas' and the common organizational membership ("*One name. One healing community.*").⁶⁶

Illustrative Saint Thomas Health Media Advertising



77. The current Saint Thomas Health website is reinforcing this positioning of the portfolio of healthcare units. As depicted below, it is communicating to consumers that all

⁶⁶ The plaintiffs' steering committee's memorandum of law in opposition to the Saint Thomas entities' global motion to dismiss Case 1:13-md-02419-RWZ Document 1042 Filed 03/28/14

medical units under the Saint Thomas umbrella belong to the organization “Saint Thomas Health” and are representatives of the organization, only in different locations (“*Saint Thomas Health is growing. We have acquired 4 new locations to better serve our community.*”).⁶⁷

Illustrative Saint Thomas website announcement



78. The analysis above of the brand portfolio components and the naming structure clearly demonstrate that ‘Saint Thomas’ is very likely perceived as the master brand and as the main driver of the purchase decision for healthcare services. The individual medical units and entities of the Saint Thomas portfolio are very likely perceived as one organization or as being provided by the same organizational source. To better understand the perception of this linkage, I will look at the relationship between the individual service offerings in the following section. The structure of relationships between brands in a portfolio is termed the brand portfolio architecture.

Brand Portfolio Architecture

79. I define brand architecture as a “brand system” where the brands are not individual performers, but must work together to support one another.⁶⁸ Brand architecture is an organizing structure of the brand and product portfolio that specifies the brand roles and the relationships among brands (Saint Thomas Health and Clinic, for example) and the different product-market

⁶⁷ <https://www.sths.com/Pages/Home.aspx>

⁶⁸ David A. Aaker, *Building Strong Brands*, Free Press: New York, 1996, pp. 241; David. A. Aaker and Erich Joachimsthaler, *Brand Leadership*, Free Press: New York, 2000.

brand contexts.⁶⁹ In the case of relationships among brands, the most common relationships in the healthcare services industry are between a master brand (e.g. Saint Thomas) and descriptive brands (e.g. Saint Thomas West Hospital). I have employed the concept in my work over the years with a large number of companies and brands.

80. Building a brand architecture and defining portfolio roles and relationships has several goals for the organization: A well-conceived brand architecture should exploit commonalities to generate synergy. In particular, the use of the portfolio brands in different contexts should enhance their visibility, create new and reinforce existing associations, and create cost efficiencies.⁷⁰ The Saint Thomas portfolio, although all offering services in the same service category, is creating synergies through leveraging the brand in several locations (Nashville and cities around Nashville) and across different healthcare offerings (hospitals and a network of medical partners). The brand architecture should further achieve clarity of product offerings for customer, employees and partners.⁷¹ This includes the nature of the offering (Saint Thomas Hospital for specialty services) as well is the source of the offering (Saint Thomas). The Saint Thomas portfolio architecture is signaling to its patients exactly what services are offers or what type of entity they are visiting and who is the provider of service, namely Saint Thomas. A third goal of brand architecture is to provide a platform for facilitate change and adoption to allow strategic advances into new markets and product categories. This is achieved by creating a master brand with strong extension potential⁷². The Saint Thomas brand has likely been created to achieve just that. The current geographic expansion strategy ("*Saint Thomas Health is growing. We have acquired 4 new locations to better serve our community.* ") as well as the addition of

⁶⁹ Ibid.

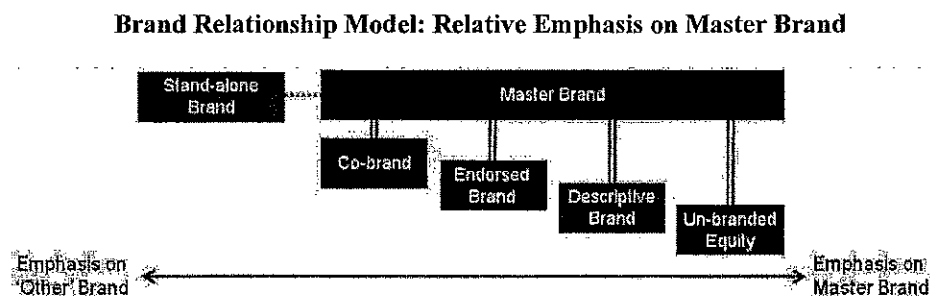
⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Ibid.

new offerings (Saint Thomas Medical Partners) is indicating that the Saint Thomas brand is used as a platform for growth. Additional goals of brand architecture include the allocation of brand-building resources, leveraging brand equity, and creating effective and powerful brands.⁷³

81. A key brand architecture building block is to determine the relationships between brands and the role that endorser and subbrands play in defining these relationships. In the previous section I discussed the brand building blocks master brand, endorser, and subbrand, as well as the driver and descriptor roles. The definition of the building blocks and roles indicates how closely brands in the portfolio are linked together and how strong the relationship is between master and portfolio brands. In the previous section I concluded that the Saint Thomas portfolio is comprised of a prevailing master brand and descriptive product brands. As depicted in the graphic below, this analysis positions the Saint Thomas portfolio to the right side of a spectrum, reaching from portfolios with relatively weak linkage between master and product brands and a focus on individual brands on the left hand side to portfolios that are either strongly linked through the master brand and descriptive brands or that solely focus on the master brand.



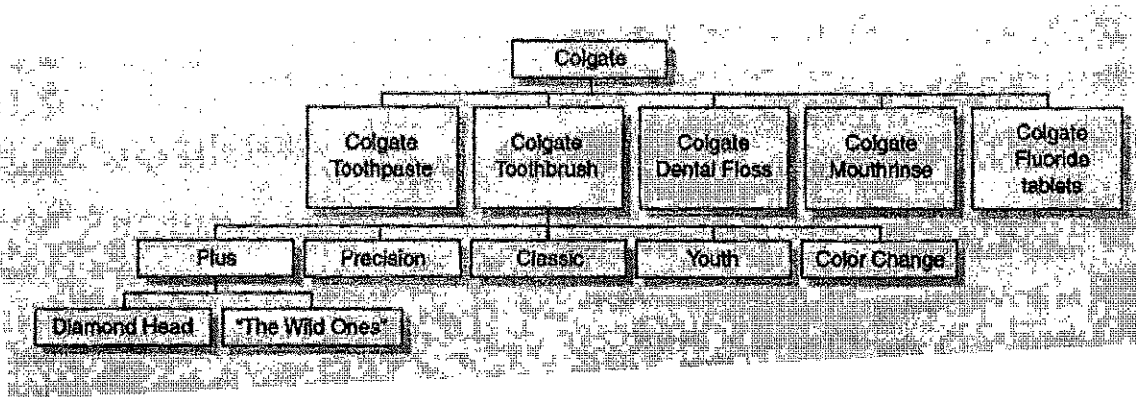
82. The relationships between the brands within the Saint Thomas portfolio have a particular effect on the likely external perception of the portfolio. As mentioned above, a goal of brand architecture is to create clarity of the product offering. The Saint Thomas brand

⁷³ Ibid.

relationships clearly and intentionally signal to consumers the strong emphasis on the master brand and the tight linkage between the Saint Thomas master brand and the descriptive subbrands. It is thus very likely that consumers perceive the descriptive brands to be linked or belonging to the master brand and thus, to be part of one and the same entity.





Brand Hierarchy

83. Having identified the relationships between brands in the portfolio, a structured framework or hierarchy, can help specify the logic of that structure. The corporate brand can serve as an “umbrella” that rests above all other brands in the company’s portfolio. A hierarchy can have both horizontal and vertical dimensions. The horizontal dimension reflects the scope of the brand in terms of subbrands or endorsed brands that reside under the umbrella brand. The vertical dimension captures the number of brands within an individual product market. Brand hierarchies can be illustrated by brand hierarchy trees which look similar to organizational charts and can be quite complex. The brand hierarchy tree for Colgate for instance shows the product range on the horizontal axis (toothpaste, toothbrush, dental floss, mouthrinse, etc.) and the products per product category on the vertical axis (for toothbrushes: plus, classic, precision, youth, color change). The purpose of specifying this structure is to enable portfolio brands to work together to create synergy, clarity and leverage.

Illustrative Example: Colgate⁷⁴

84. In the case of Saint Thomas, the brand portfolio includes a master brand or corporate brand (Saint Thomas Health) and subbrands (e.g. Saint Thomas West Hospital and Saint Thomas Neurosurgical). As for Saint Thomas, there are no real subbrands but rather descriptive brands of the medical units, the vertical dimension is limited to one category. The horizontal dimension however includes all products or services offerings, namely the hospitals as well as Saint Thomas Medical Partners. Although Saint Thomas Neurosurgical is no longer presented as an individual product offering in publicly available materials, it can be identified as a descriptive product brand and is placed in the hierarchy below the corporate brand Saint Thomas Health. Saint Thomas brand hierarchy levels are depicted in the table below.

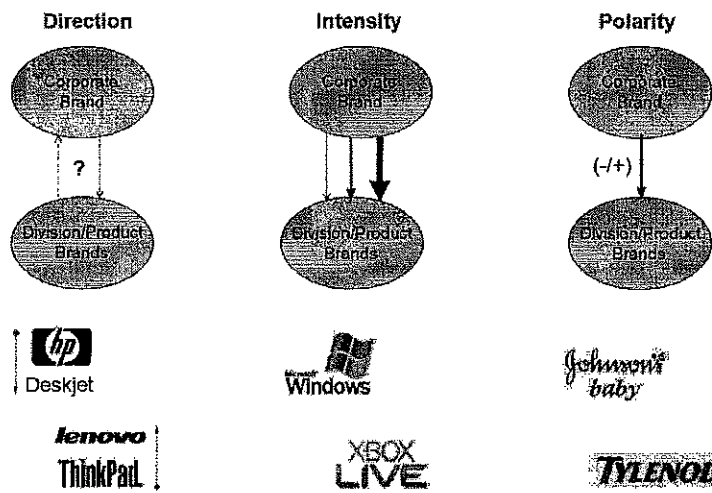
Illustrative Application of Brand Hierarchy Levels

Corporate Brand	 Saint Thomas Health			
Product/Service Brand	 Saint Thomas West Hospital	 Saint Thomas Midtown Hospital	 Saint Thomas Hospital for Specialty Surgery	Saint Thomas Neurosurgical Center

⁷⁴ Ibid.

Brand Equity Flow

85. A relationship between two or more brands, usually a master brand and a subbrand, allows that one brand leverages the equity that resides with another, stronger brand in the portfolio. In case of a brand extension for instance a strong linkage of the new offering to the existing master brand can positively influence the reception and launch success of the new subbrand. Three aspects of brand equity flow should be considered: a) direction, b) intensity and c) polarity of the equity flow.

Dimensions of Brand Equity Flows: Illustrative Examples

86. Between a master or corporate brand and a subbrand, equity can flow either from the corporate brand to the subbrand or vice versa. Whether equity is transferred from the master brand to a subbrand or the other way around depends on the role that the individual brands play, and where the driver role resides. An example is depicted in the graphic above. In the case of Saint Thomas Health and the Saint Thomas subbrands, the driver role clearly resides with the Saint Thomas master brand. Thus the equity flow is directed from the corporate brand to the subbrand. Every new Saint Thomas offering, e.g. a new hospital or other medical unit, leverages

the existing brand equity that resides with Saint Thomas as it is prominently identified as an offering of Saint Thomas Health.

87. Having identified the direction of the equity flow, the second aspect to consider is its intensity. Equity flow can either be strong or relatively subtle, depending on how closely the two brands are linked. As discussed in the previous section, the Saint Thomas portfolio is comprised of a master brand and a number of descriptive brands. The brand equity solely resides with the ‘Saint Thomas’ master brand, while the descriptive parts of the service offering (“hospital”, “clinic”, “network”) are purely functional. On the spectrum depicted above, the Saint Thomas brand architecture would thus be positioned to the right, as there is strong emphasis on the master brand and equity flow from the master brand to the descriptive brands.

88. The third aspect to consider with respect to brand equity flow is polarity, i.e. whether the equity flow is positive or negative. If there is a strong linkage between the corporate brand and the subbrands, equity will be positive as the transfer of associations is meant to support the subbrands’ perception. However, in cases of weak or no linkage, equity flow from the subbrand to the corporate brand might very well be negative. When a subbrand targets for instance another product category than the core offering or a more price-sensitive customer group, the subbrand will be stand-alone or co-branded to avoid dilution of the master brand or vice versa. In the case at hand the linkage between corporate and subbrand is strong and thus the polarity of the brand equity flow is positive. The brand equity resides with the corporate brand “Saint Thomas Health” and is transferred to the individual subbrands due to their strong linkage.

89. The analysis of the brand equity flow has important implications for the perception of the Saint Thomas portfolio. As the discussion above demonstrates, there is a strong, positive equity flow from the master brand to the descriptive product brands. This implies that all

descriptive product brands leverage the same brand associations from consumers' memory network which impacts and simplifies the processing of brand cues and evaluation of the offering in System 1 mode of thinking. Hence, it is very likely that consumers' perceive the individual product brands to be strongly linked or even belonging to the same organization and include brand associations with "Saint Thomas" in the evaluation process of any individual service offering within the Saint Thomas portfolio.

Conclusions from discussion of brand portfolio and brand architecture

90. The review of theoretical concepts of brand portfolio and architecture has provided insights into how the Saint Thomas brand and the individual entities in the product portfolio are likely to be perceived by consumers. First I have demonstrated how "Saint Thomas" serves as a master brand to a portfolio of descriptive subbrands and takes on a driver role in the purchase decision. Hence, the majority of brand equity resides with "Saint Thomas" as opposed to the descriptive terms "hospital" or "clinic". A prospective patient would have thus based a majority of his or her evaluation of Saint Thomas Neurosurgical on the brand associations with the master brand Saint Thomas, and would have most likely not differentiated between the individual entities.

91. Second, I have addressed the brand architecture and relationships between the individual product or service brands. I concluded that the portfolio is focused around the Saint Thomas master brand and clearly links the descriptive subbrands to Saint Thomas as the source and provider of service. It is thus very likely that consumers perceive the Saint Thomas entities as one common unit. It can also be expected that they perceive the entities belonging to one single service provider.

92. Third, the dissection of the brand hierarchy and the equity flow between brands at

different levels of the hierarchy revealed that Saint Thomas Health serves as the corporate brand above the range of healthcare service offerings (hospitals and physician network). Positive brand equity is thus transferred from the master brand to the product brands. This leads to the assumption that brand associations with the central node of the memory network, namely “Saint Thomas”, have a major impact on the consumer evaluation process of any of the product offerings. It is very likely that consumers include these associations in the evaluation of any of the individual entities and perceive them to be strongly linked.

EMPIRICAL CONSUMER SURVEY IN NASHVILLE

93. In order to validate the analyses that I have conducted so far, I asked consultants at Vivaldi Partners to conduct a quantitative commercial study and to commission an independent market research company to field the study. This section will present the methodology and results of the research. Based on the outcomes, I will provide my final expert opinion on the case at hand.

Survey Background and Design

94. To design a research setting that would allow validation of the proposed theory and conclusions, I first reviewed existing research and studies on brand portfolio and perceived linkage between brands. While some studies have tested the directions and strengths of associations and the resulting spillover effects in brand portfolios, none have tested the consumer perception of brand relationships and brand architecture in an empirical setting.⁷⁵ In our own work at Vivaldi, we frequently apply measures of brand equity to test similarity and overlap of brand associations between portfolio brands.

⁷⁵ e.g. Lei, J., Dawar, N., Lemmink, J., (2008). Negative Spillover in Brand Portfolios: Exploring the Antecedents of Asymmetric Effects, *Journal of Marketing*, 72, 111–123.

95. The survey I oversaw employed a web-based approach, with fielding carried out by Research Now Group, Inc. In total, the survey included 620 respondents, aged 18 and older. One survey version was used which incorporated different routes respondents could be assigned. Sample for the survey was supplied by Research Now Group, Inc., who also operated the consumer research panel. I selected research now based on its industry-leading online panel size, representativeness, and its consulting affiliation with many of the world's largest and most well-known brands.⁷⁶ Technical support in the programming of the online survey was provided by respondi⁷⁷. The survey provided the basis for different approaches and analyses, primarily relating to the conclusions drawn in the previous sub-section.

96. Based on a carefully designed screening process, I ensured that those surveyed were representative of the general population in the Nashville area, and were not overly informed about the local hospital landscape due to their professional backgrounds. The panel included respondents residing in Nashville (Davidson County) and adjacent counties. Respondents were also screened for age (older than 18), and occupation (excluding marketing, advertising, market research and health care). A demographic overview of the sample is depicted in Exhibit C.

97. The survey provided the basis for different statistical approaches and analyses. With regard to statistical analyses, three main components of the survey can be separated:

- a) To reveal the perceptions regarding the relationship between Saint Thomas Neurosurgical and the three Saint Thomas entities in question, I used a test-and-control approach where survey respondents were randomly assigned into either a test or a control group. The test group were presented with an image, showing a hospital reception desk with a sign stating "Saint Thomas Outpatient Neurosurgical Center"

⁷⁶ <http://www.researchnow.com/en-US/~media/578E9AB322D5491CA61005CF64005C54.ashx>

⁷⁷ <http://www.respondi.com/en/access-panels-services>

followed by the question whether they believed this entity or medical unit to be part of another entity from a provided list or whether they believed it was operated independently. The answer set was multiple choice, listing the three Saint Thomas units, other known hospitals in the Nashville area as well as the options “not any” and “not any of the above,” providing an open ended text box. The control group were presented with the same image, only the sign reading “TriStar Skyline Neuroscience Center”. This medical unit was chosen as a control as it fulfills similar criteria to Saint Thomas Outpatient Neurosurgical Center. The hospital group TriStar Health is, similar to Saint Thomas Health, well presented and well known in and around the city of Nashville. The chosen unit for the control group, “TriStar Skyline Neuroscience Center” is, like the test unit, a clinic co-located in a TriStar hospital and was thus considered a comparable control. The answer options were identical except that all Saint Thomas brands were exchanged for entities from the TriStar hospital family. An open-ended question followed up on the rationale behind respondents’ indicated perceptions. The choice of the shown image was based on the actual entrance to Saint Thomas Neurosurgical and the sign on the door to the clinic in Saint Thomas Hospital (Exhibit D). Using Photoshop, the image was placed into a generic hospital reception area to clarify the context, but not provide any leading cues that would direct respondents towards believing it was a Saint Thomas entity. Hence, the image shown to the control group was the same exact image except for the sign. Providing a list of hospitals as opposed to an unaided, open-ended question asking whether this entity was related to any other entity reproduced the real-world setting as any patient seeking treatment at Saint Thomas Neurosurgical would have to enter Saint Thomas hospital

and thus be exposed to the master brand. The images shown to the test and control group are provided in Exhibit E.

- b) Closed-ended, single response question to reveal perceived proximity of a group of brands. The sample was split into four monads, made up of one test group and three controls. The test group was shown four brands out of the Saint Thomas portfolio, and asked to indicate on a scale how close they perceive the relationship between the four brands. One test group provided names of another hospital group, to provide an in-category control. The other two controls provided sets of four hotel brands each to account for an out-of-category control. Each monad was only exposed to one of the four groups and subsequently asked how closely they perceive the relationship between the brands. Again, an open-ended question followed up on the rationale behind respondents' answer.
- c) Closed-ended, rating scale questions to determine the strength of brand associations for the Saint Thomas brands as well as controls from the TriStar and Vanderbilt hospital families. Respondents were split into nine monads for the respective brands. Thus, each respondent was only asked to evaluate brand associations for one brand. To ensure that respondents were knowledgeable of the assigned brand and able to make an adequate assessment, the question was preceded by a question for aided brand awareness. Only if respondents were at least aware of a brand they could be assigned this brand in the following questions for brand associations. Thus, if respondents were not aware of any of the entities, they were screened out for this question.

98. As in all three questions the sample was split into monads (two, four and nine

monads for questions 1, 2, and 3, respectively), I ensured that all groups were representative of the overall sample in terms of age and gender distribution.

Results

Component I -- Brand Affiliation

99. The theoretical analysis of the Saint Thomas portfolio provided strong reason to believe that Saint Thomas Neurosurgical and the other Saint Thomas entities would be perceived by consumers to be related or to be offered by the same organization. It would thus be expected that survey respondents associate Saint Thomas Neurosurgical with one or even all of the listed Saint Thomas entities. This is reflected in the survey results (Exhibit F): Within the test group, 59% indicated the shown unity to be part of the corporate brand Saint Thomas Health, while 60% believed it was part of Saint Thomas Hospital, and another 55% believed it was part of Saint Thomas Network. These results are independent of respondents' level of familiarity with the Saint Thomas entities (respondents who had at least heard of the entities were not more or less likely to perceive an affiliation between them), as there were no significant correlations between the level of awareness and perceived relationships.

100. As the sum of these three groups far exceeds 100%, many respondents indicated that they believed the shown medical unit to be part of more than one entity. While 46% of respondents linked the Clinic to a single entity, 9% said it was part of two entities. 37% indicated they believed the shown entity was part of all three of the listed Saint Thomas entities. This result supports the notion that consumers perceive the entities to be linked and share the same brand equity originating from the master brand. It can also be interpreted as an indication that many respondents do not know the difference between the individual entities and perceive them to be

inseparable.

101. It should be noted that respondents were provided with the option “not part of any” to indicate they believed Saint Thomas Neurosurgical to be a stand-alone entity, and the brand equity to reside with the Clinic rather than the Saint Thomas brand. The data does, however, not support this alternative. Only 1% indicated they believed that the shown entity was not part of any other entity, while 6% weren’t sure.

102. To ensure validity of the test results I included a control group as a second monad. As the control group setting fulfills the same criteria, for the control group we would expect a similar result as for the test group. As the TriStar brand portfolio is, analogous to the Saint Thomas portfolio, strongly linked by the master brand, respondents are expected to perceive this connection and associate the shown unit “TriStar Skyline Neuroscience Center” with at least one or all other listed TriStar brands. Additionally, it would be expected that some respondents, who are actually familiar with the entity, would unaidedly name “TriStar Skyline Medical Center” as another connected entity, as the medical unit the control group was exposed to is actually co-located in this hospital.

103. The results for the control group further support the prediction that respondents will generally perceive a connection between the master brand and subbrands if the brand architecture, as is the case for Saint Thomas, links the master brand to descriptive subbrands. For the image shown to the control group, reading “TriStar Skyline Neuroscience Center”, 61% indicated it was linked to the corporate brand TriStar Health. 12% and 17% indicated they believe it was linked to TriStar Horizon Medical Center and TriStar Centennial Medical Center, respectively. Another 7% named TriStar Skyline Medical Center as an entity the shown medical unit was linked to.

104. In addition to the quantitative survey results, I asked respondents for the rationale behind their answers. Out of the test group, only 1% answered “is not part of any” and none of these provided a reason for choosing the answer option. With respect to those respondents who did indicate they believed the entity presented in the cue to be part of at least one of the Saint Thomas entity almost unanimously indicated that the name on the sign led them to believe it was part of another Saint Thomas entity. Some were slightly more elaborate. One respondent, who was not familiar with the entities said, “*Because the name starts with Saint Thomas - I am not sure of the distinction between the three Saint Thomas entities and assume they are interconnected*”. Interestingly, another respondent who was familiar with the entities indicated the shown entity was part of all three Saint Thomas entities. As a rationale he said he chose his answer “*Based on the name of the center, and the familiarity I have with the Saint Thomas Health network locally.*” Hence, even someone who indicates to know the facilities perceived the entities to be part of each other or inseparable.

Component II – Brand Relationship

105. The discussion in the previous section on brand architecture and brand relationships led me to hypothesize that there is a strong perceived relationship between the brands in the Saint Thomas portfolio. Consumers are expected to perceive this strong linkage when seeing and evaluating the portfolio brands together and understand their linkage through the master brand, “Saint Thomas”. Reversely, consumers would be expected to perceive relatively low or no linkage between brands of a given portfolio that are not as strongly connected and do not share a common master brand. To find out if this is the case, I included a control group of hospitals (Capella Healthcare, St Mary’s Regional Medical Center, National Park Medical

Center, Southwestern Medical Center) which belong to the same corporate brand (Capella Healthcare) but show no linkage through a common master brand. On the other hand, the product brands share a common descriptor (Medical Center), which could lead respondents to perceive a linkage. However, as I discussed in the theoretical analysis, the descriptor does not drive consumer decision-making and should thus not carry any brand equity and lead consumers to perceive a connection. In addition to the control group of hospitals, I further included two other control groups of out-of-category brand portfolios (with master brands Holiday Inn and Wyndham Worldwide), to account for cross-category validity of the results. The stimuli shown to respondents in the online survey are presented in Exhibit G.

106. The survey results (Exhibit H) provide support for the hypothesis that consumers perceive a strong linkage of the Saint Thomas portfolio brands. When asked how they perceived the connection between the shown service providers on a scale from 1 (*They are all unrelated, independent entities*) to 4 (*They are closely related and are part of the same entity*), 72% of test group respondents indicated they perceived the entities to be closely related and part of the same entity (score 4), while another 21% said the entities were “*somehow related*” (score 3), the mean score being 3.6. The result can be interpreted as a clear validation of the theoretical analysis.

107. In the first monad group presented respondents with four brands of healthcare providers, one of them being the head organization (Capella Healthcare) and the others being hospitals part of the same organization (St Mary’s Regional Medical Center, National Park Medical Center, Southwestern Medical Center). The survey data demonstrates that respondents did not perceive these brands as being part of one entity, the mean score being 1.5 on the same scale as described above. 71% indicated they believed the brands to be “*all unrelated, independent entities*”. This result underlines the driver role of the master brand “Saint Thomas”.

All hospital brands of this control set carry the descriptor “Medical Center.” However this commonality does not prove to carry any identification value of the source of the offering, as respondents did not perceive a linkage between the brands.

108. The results for the two additional monads from the hospitality industry (Holiday Inn and Wyndham Worldwide) provide additional support for the perceived linkage of a portfolio assembled around a master brand. The Holiday Inn brand portfolio has, similar to that of Saint Thomas, a master brand (“Holiday Inn”) as well as descriptive subbrands (Express, Club Vacations, Resort). Similarly to the Saint Thomas portfolio, respondents perceived the portfolio to be strongly related, with a mean score of 3.7 (76% of respondents said “*They are closely related and are part of the same entity*”). For the fourth control group Wyndham Worldwide, the response pattern looks slightly different than expected. Although the brand portfolio is not linked to the master brand (Ramada, Howard Johnson, Super8) respondents were rather split with respect to the perception of linkage (25% *All unrelated, independent entities*, 15% *They are relatively unrelated*, 35% *Somehow related*, 25% *They are closely related and are part of the same entity*) with a mean score of 2.6. This response pattern can be explained by looking at the qualitative responses. Many respondents were aware of the shared loyalty/ rewards program these hotel chains operate (“Wyndham Rewards”) and thus about the corporate linkage between the individual hotel chains.

Component III – Brand Associations

109. The discussion on associative memory networks in the previous sections led me to hypothesize that the strong linkage of the individual Saint Thomas entities with the master brand translates into a transfer of brand associations from the master brand to the individual entities.

Thus, it would be expected that the evaluation of brand associations would show strong similarities of results between the four tested Saint Thomas entities. This would be reflected in small differences between the mean scores for the individual attributes as well as the percentages of respondents falling into the same answer categories (similar percentage of respondents that indicated e.g. “Strongly agree” between the Saint Thomas Entities).

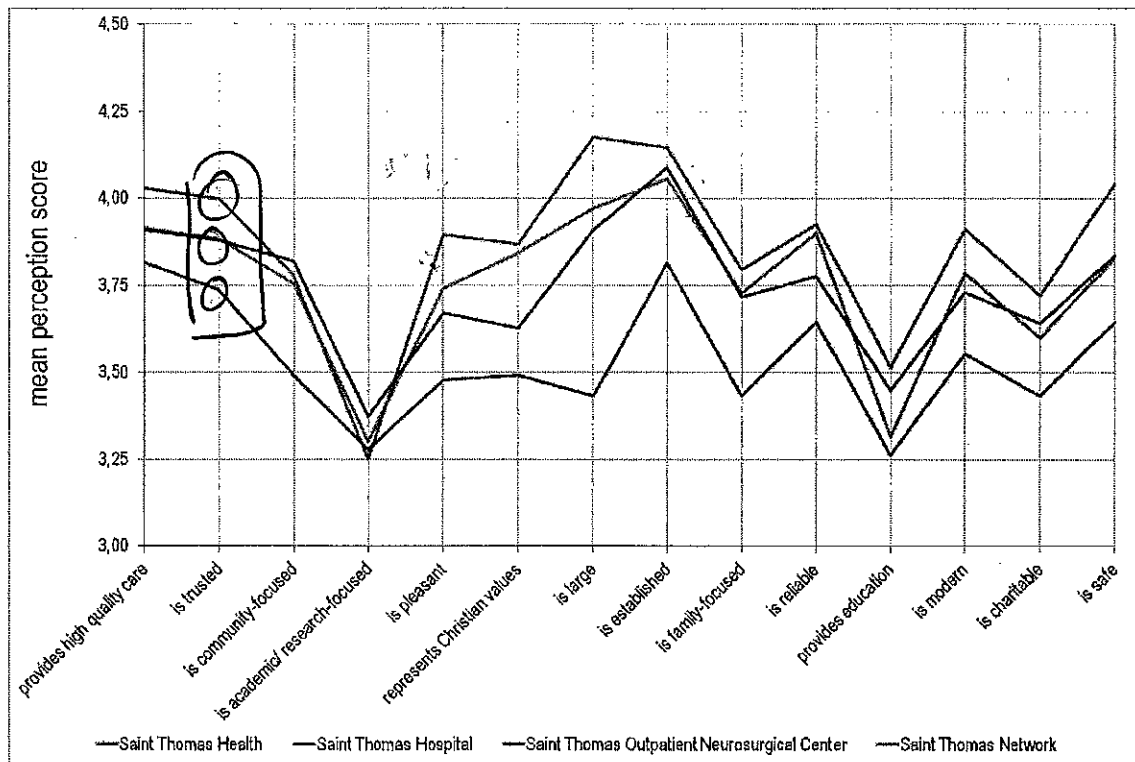
110. The survey results (Exhibit I) provide support for the hypothesized similarity in perception of attributes. The visual analysis of the data demonstrates the commonalities of perceived brand associations as the graphs for all entities run relatively parallel to each other. The data demonstrates that all Saint Thomas entities are for instance perceived to be “established” (mean score = 4.0), to provide “high quality care” (mean score = 3.9), and to be “trusted” (mean score = 3.8). At the same time, all entities are perceived to rate less strongly on the attributes “academic/ research-focused” (mean score = 3.3) and “providing education” (mean score = 3.4).

111. The fact that respondents, as hypothesized, have very similar associations across all Saint Thomas entities can be interpreted as a strong linkage of nodes in consumers’ memory networks. Thus, through the driver role of the Saint Thomas master brand, brand equity and thus brand associations are leveraged across the portfolio of descriptive subbrands. These associations influence their decision making and evaluation processes as described in my theory review in one of the previous sections. Accordingly, consumers’ are likely to subconsciously apply shared brand associations of the Saint Thomas brand to evaluate the individual medical units.

620.9 70

A handwritten diagram consisting of a large oval on the left containing the text "620.9". A horizontal line connects the right side of this oval to a smaller circle on the right containing the text "70". From the right side of the "70" circle, an arrow points horizontally to the right. Below the line connecting the two shapes, an arrow points upwards towards the junction.

Output: Perception of Brand Attributes

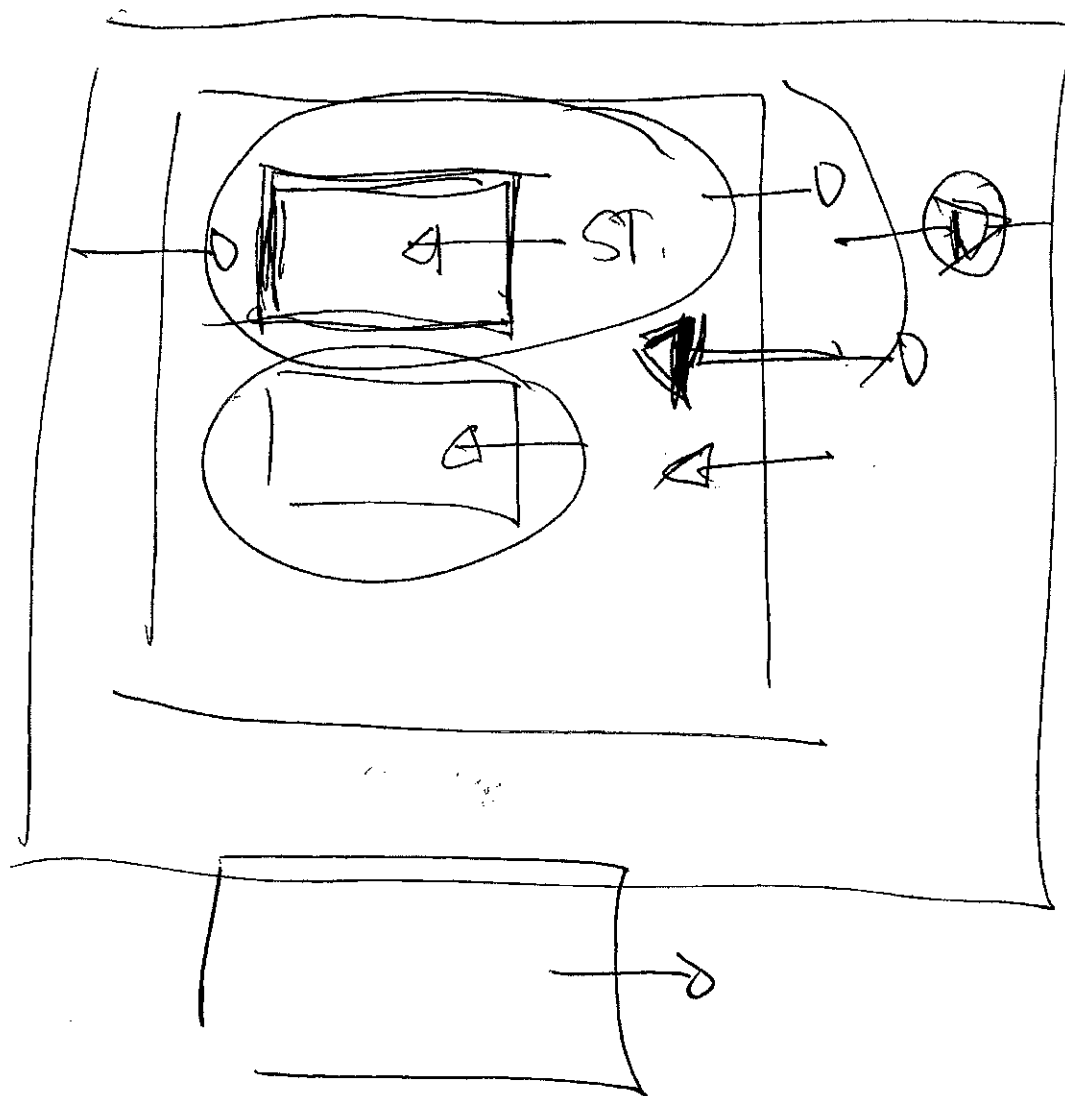


Conclusions

112. In summary, I conclude: first, consumers perceive the Saint Thomas brand as the driver and master brand within the Saint Thomas portfolio; second, consumers perceive a strong linkage between the individual Saint Thomas entities and believe they are part of the same entity, third, the strong linkage between the Saint Thomas brands in consumers' minds lets them draw from the same memory network.

SUMMARY OF CONCLUSIONS

113. My analyses in this report show that consumers perceive the Saint Thomas brands, including the entities in question (Saint Thomas Neurosurgical, Saint Thomas Hospital, Saint



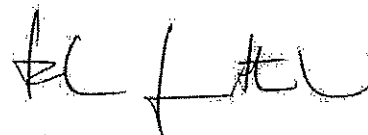
Thomas Health and Saint Thomas Network) as belonging to the same entity. This conclusion follows from my multiple analyses and application of theoretical and empirical principles of branding, brand portfolio and brand architecture. The perceptions of consumers can be explained in part by the strong role of the Saint Thomas brand, the way the Saint Thomas portfolio is set up with a master brand playing a major driver role, and a brand architecture that stresses the strong relationships between the individual brands through a strong focus on the master brand. This perception is intentionally supported by the marketing communication of Saint Thomas Health.

114. In sum, for the reasons articulated in this report, it is my opinion that:

- a. Consumers are likely to perceive the Saint Thomas Entities to be part of the same organization
- b. Consumers perceive Saint Thomas, rather than the individual entities, to be the provider of service for any treatment or services provided by the individual medical units
- c. Consumers transfer positive brand associations with the Saint Thomas master brand to their evaluation of the individual medical units

115. I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

116. Executed December 16, 2015 in New York, New York.



Erich Joachimsthaler, Ph.D.

Exhibit A

RESUME, PUBLICATIONS, AND ACADEMIC CREDENTIALS

ERICH A. JOACHIMSTHALER, Ph.D.

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U.S. Citizenship and German Citizenship

Education

Post-Doctoral Research Fellow	1987 - 1988	Harvard Business School
Doctor of Philosophy	1981 - 1985	University of Kansas Business Administration Specialization: Marketing and Quantitative Methods
Master of Science	1980 - 1981	University of Kansas Marketing Research
Vordiplom	1979 - 1980	University of Frankfurt Economics
Diplom Betriebswirt	1976 - 1979	Fachhochschule Giessen- Friedberg Business Administration and Computer Science

Doctoral Dissertation

"Lp-Norm Estimation in Discriminant Analysis."
Chairs: John L. Lastovicka and Kenneth O. Cogger

Academic Experience

- 2004 - Visiting Professor of Business Administration
Department of Marketing, Instituto Estudios Superios de la Empresa (IESE), Barcelona
- 1994 - 1998 Rust Visiting Professor of Business Administration
Colgate Darden Graduate School of Business Administration
University of Virginia, Charlottesville
- 1989 - 1994 Associate Professor of Marketing
Department of Marketing, Instituto Estudios Superios de la Empresa (IESE), Barcelona
- 1985 - 1987 Assistant Professor of Marketing
Department of Marketing, University of Houston, Houston
- 1982 - 1984 Adjunct Professor of Management
Institute of Safety and Systems Management, University of Southern California, Los Angeles
- 1981 - 1985 Graduate Instructor in Marketing
School of Business and School of Journalism, University of Kansas, Lawrence

Work Experience

- 2003 Co-Founder and Managing Director, E-Edge Company, Management Development and Executive Education, New York and London
- 1999 Founder and Chief Executive Officer, Vivaldi Partners, New York, London, Munich, Hamburg, Zurich.
- 1998 - 1999 Chairman, Prophet Brand Strategy, New York and San Francisco.
- 1995 - 1998 Aaker-Joachimsthaler & Partners (AJ&P), Charlottesville and Berkeley. AJ&P was acquired by Prophet Brand Strategy in January of 1999.
- 1990 - 1994 Alza Limited - Strategic Marketing and Research Consultancy, Barcelona.

Professional Memberships

American Marketing Association (AMA)

PERSONAL INFORMATION

Erich is married to Daniela Gomez. Daniela was born in Santa Fe, Argentina and is an audiologist with a specialty for hearing disorders. They have two daughters, Sara and Sophia, and one son, Julian.

PUBLICATIONS

A. Publications

Brand Strategy, Digital, Innovation and Marketing

"Social Currency in the B2B World: Building Strong Brands," April 2013, as covered in *Adweek*, April 2013, "Brands Make Strides in Social Media Still Lag Their Consumer Cousins, Though"

"Social Currency Impact Study 2013: What it takes to create lasting impact" as covered in *Forbes* March 2013 in the article "Subway, Google and Target are top brands for Social Currency", by Kurt Badenhausen, among others

Building a Better Business: Using Social Currency to Grow in Today's Hyper-Connected World, *MWorld*, Winter 2012-2013

Why Social Currency becomes a Key Driver of a Firm's Brand Equity – Insights from the Automotive Industry, **Long Range Planning** (co-written with Lara Lobschat, Markus A. Zinnbauer, Florian Pallas), December 2012

What's the Right Entry Point for Emerging Markets? **Harvard Business Review** insert, April 2012

DemandFirst: Wie man erfolgreich für Kunden innoviert, **Innovations-Forum: Magazin für Ideenfindung und Produktentwicklung** (co-written with Kristina Stroedter and Markus Zinnbauer), February 2012

How Brands can set the Lead in Digital Information Overflow, **Werben & Verkaufen Digital**, 2011

Decoding Demand Opportunities, **Business Strategy Review**, 2010

Von Kommunikation zu Konversation, **Virale Kommunikation**, 2009

Was bleibt nach 20 Jahren Markendifferenzierung?, **Absatzwirtschaft**, 2009

Innovationsfähigkeit Schweizer Unternehmen, **Marketing**, 2008

What's Your Company's Growth Playbook?, **American Management Association**, 2008

Room to Grow, **Marketing Management**, 2007

Making the Most of Customers, **strategy+business magazine**, 2007

Profitable Growth Through Easy Answers, **Absatzwirtschaft**, 2006

Power Brands der nächsten Generation, **Absatzwirtschaft Sonderheft**, 2005

Profitabel wachsen mit einfachen Antworten, **Absatzwirtschaft Sonderheft**, 2005

Der Zweck heiligt die Mittel, **Absatzwirtschaft**, 2004.

Ist das Markenarchitektur-Konzept noch zeitgemäße?, **Absatzwirtschaft Online**, 2004.

Muessen die Marken in Zukunft ihre Herkunft verleugnen?, **Absatzwirtschaft**, 2003.

Mitarbeiter: Die vergessene Zielgruppe fuer Markenerfolge, **Absatzwirtschaft**, 2002.

Je kleiner desto besser, **Absatzwirtschaft**, 2002.

Getting the Most Out of Your Branding Effort, **Markenartikel**, 2002.

Aufbau von Marken im Zeitalter der Post-Massenmedien, **Moderne Markenführung**, 2001, 3. Auflage, Franz-Rudolf Esch (Eds), Gabler Verlag, Wiesbaden, with David Aaker.

Top Marken Strategien: Markenwert schaffen und absichern, **Absatzwirtschaft**, 2000.

The Branding Relationship Spectrum: The Key to the Brand Architecture Challenge, **California Management Review**, 2000, with David A. Aaker.

Brand Leadership, **Brandweek**, 2000, with David A. Aaker.

Brand Leadership, **The Free Press**, New York, 2000, with David A. Aaker. Translated in German, Spanish, Italian, Finnish, Japanese, Korean, and Portugese.

The Lure of Global Branding, **Harvard Business Review**, 1999, with David A. Aaker.

Building Brands without Mass Media Advertising: Lessons from Europe, **Harvard Business Review**, 1997, with David A. Aaker.

IMOS: An International Market opportunity Screening System, **Journal of International Marketing**, 1994, with Antonie Stam and V. Kumar.

After the Wall: Marketing Guidelines for Eastern Europe, **Sloan Management Review**, 1991, with John A. Quelch; reprinted in: Después del Muro: Pautas de Comercialización para Europa del Este, **Alta Dirección**, 1992 and European Marketing: Readings and Cases, Chris Halliburton and Reinhard Hünerberg, Addison-Wesley, 1993.

El Valor del País de Origin (The Value of Country of Origin Information), **Actualidad de Economía**, 1991.

Methodology

New Answers for Old Questions: Conjoint Analysis Takes the Guess Work out of Marketing Decisions, **Dirección Farmaceutica**, 1994, with Paul Green.

Mathematical Programming Procedures for the Classification Problem in Discriminant Analysis: A Review, **Multivariate Behavioral Research**, 1990, with Antonie Stam.

A Robust Mixed-Integer Approach to Establish Classification Rules for the Discriminant Problem, **European Journal of operational Research**, 1989, with Antonie Stam.

Solving the Classification Problem in Discriminant Analysis Via Linear and Nonlinear Programming Methods, **Decision Sciences**, 1989, with Antonie Stam.

Four Approaches to the Classification Problem in Discriminant Analysis, **Decision Sciences**, 1988, with Antonie Stam.

4MODE1 AND 4MODE2: Fortran IV Programs for the Four-Mode Components Analysis Problem, **Journal of Marketing Research**, (Computer Abstracts), 1985, with John Lastovicka.

RELCON: A Program for the Estimation of Internal Consistency of Composites with Congeneric Measurement Properties, **Journal of Marketing Research**, (Computer Abstracts), 1985, with Lane Curtis.

Technology, Strategy and Industrial Marketing Buying/Selling

Decision Support System Implementation: A Meta Analysis, **Management Information Systems (MIS) Quarterly**, 1992, with Maryam Alavi.

Sales Resource Allocation with Multiple Conflicting Objectives: An Interactive Decision Support Aid, **Decision Sciences**, 1991, with Antonie Stam and Lorraine Gardiner.

Order (Market) Selection Given Multiple Conflicting Objectives and Goals: An Interactive Marketing-Manufacturing Decision Model, **Decision Sciences**, 1989, with Antonie Stam and Lorraine Gardiner.

Influence of Formalization on the Organizational Commitment and Work Alienation of Salespeople and Industrial Buyers, **Journal of Marketing Research**, 1988, with Ronald Michaels, William Cron, and Alan Dubinsky.

Multicriteria Issues in Marketing: A Sales Resource Allocation Example and Potential Areas of Future Research, **Lecture Notes in Economics and Mathematical Systems Series**, 1988, Springer Verlag, with Lorraine Gardiner and Antonie Stam.

Individual Difference Factors in the Satisfaction and Usage of a Marketing Decision Support System, **Journal of Marketing Research**, 1987, with George Zinkhan and Thomas C. Kinnear.

Role Stress Among Industrial Buyers: An Integrative Model with Implications for Marketing, **Journal of Marketing**, 1987, with Ronald E. Michaels and Ralph L. Day.

Methodology and Consumer Behavior

Measurement Validity of VALS and a Custom Lifestyle Typology with Multiplicative Factoring of Multimethod- Multitrait Matrices, **Journal of Marketing Research**, 1990, with John Lastovicka and John P. Murry.

Improving Personality-Behavior Relationships, **Journal of Consumer Research**, 1988, with John Lastovicka.

A Lifestyle Typology to Model Young Male Drinking and Driving, **Journal of Consumer Research**, 1987, with John Lastovicka, John P. Murry, and Gaurav Bhalla.

Optimal Stimulation Level, Exploratory Behavior Models, **Journal of Consumer Research**, 1984, with John Lastovicka.

B. Books & Book Chapters

Social Currency: How to build strong brands and businesses in the digitally-connected world, Digital Darwinism, 2013.

What is the right entry point for emerging markets: Targeting customers at the bottom or the middle of the pyramid, A white paper by Harvard Business School Analytic Services: The Asia Innovation Series, 2012

Hidden in Plain Sight: How to find and execute your company's next big growth strategy, Harvard Business School Press, 2007.

"Strategie und Architektur fuer Markenportfolios" in Handbuch Markenführung, Band 2, 2004, Manfred Bruhn, Gabler Verlag, Wiesbaden, with Markus Pfeiffer.

Brand Leadership, The Free Press, New York, 2000, with David A. Aaker. Translated in German, Spanish, Italian, Finnish, Japanese, Korean, and Portugese.

"Building Brands Without Mass Media" in *Harvard Business Review on Brand Management*, Harvard Business School Press, 1999.

"Branding Challenges For Transitional Economy Firms in Local Markets," in *Marketing Issues in Transitional Economies*, 1999, Rajeev Batra, Kluwer Academic Publishers, Norwell, Massachusetts, with Jordi Garolera and Dana Pillsbury.

"Nestle Buitoni: The House that Mamma Built," in *Relationship Marketing: Strategy and Implementation*, 1999, Helen Peck, Adrian Payne, Martin Christopher, and Moira Clark, Butterworth-Heinemann, Oxford, with Edward Hickman.

C. Working Papers & Teaching Notes, etc.

"The Always-On Consumer," February 2014

"Brands & Social Networks: New findings on how consumers connect with brands," February 2013

"Social Currency 2012: How brands and businesses can prosper in a digitally connected world," September 2012

"Social Currency: Why brands need to build and nurture Social Currency," May 2010, as covered in *Fast Company*, "Five Steps for Consumer Brands to Earn Social Currency," May 2010, and "How to Measure Brand Value: Likes, Followers, Influencers, Views? No, Social Currency", July 2010

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Energia General (Eg3): Retail Service Stations in Argentina, Darden Educational Material, 1996.

Nike Europe, IESE Case Publication No. M-968, 1995.

Renault SA, IESE Case Publication No. M-966, 1995.

Hugo Boss AG, IESE Case Publication No. M-965, 1995.

IBM Ambra, IESE Case Publication No. M-963, 1995.

ABB: Electrical Motors, Case Study, 1995.

CCNR-Coca-Cola Nestlé Refreshments, Case Study, 1995.

Corporate Brands, IESE Working Paper.

The Andrex Case Story, IESE Case Publication No. M-952, 1994.

The Nestlé Buitoni Case Story: The House that Mamma Built, IESE Case Publication No. M-953, with Edward Hickman, 1994.

Marketing Metamorphosis: From Products to Brands to Consumers, IESE Working Paper No. MN-282, 1994.

Building Global Brand-Consumer Relationships, IESE Working Paper No. MN-294, 1994.

Maintaining Global Brand-Consumer Relationships, IESE Working Paper No. M-293, 1994.

Conjoint Analysis Takes the Guess Work Out of Pharmaceutical Marketing Decisions, IESE Publication No.: MN-284, with Paul Green, 1994.

The Häagen-Dazs Story, IESE Case Publication No. M-940, with Peter Taugbol, 1994.

The Swatch Story, IESE Case Publication No. M-930, 1993.

Anfi del Mar, S.A., IESE Case Publication No. M-888, with Madhur Mehta 1993; Teaching Note No.: MT-8, and Supplementary Material No.: M-924.

RCI: Service Quality and Its Measurement, IESE Case Publication No. M-905 with Brian Hare, 1993; Teaching Note for RCI M-10.

Exhibit B

EXPERT WITNESS EXPERIENCE:

TESTIMONY (DEPOSITION OR TRIAL), PAST 5 YEARS

ERICH A. JOACHIMSTHALER Ph.D.

Date: August 31, 2015

2015

BANCO SANTANDER VS. DEUTSCHE SPARKASSEN- AND GIROVERBAND

Case No. 5U 82/11

German Court

May 2014 – January 2015: Submission of a Report

WORLD TRADE CENTERS ASSOCIATION, INC. AND TRADEMARK OFFICE

Case No. 85/473,927 (WTC, Cl. 25)

February – October 2014: Submission of a Report

MEGGITT (ORANGE COUNTY), INC. AND MEGGITT (MARYLAND), INC.,

v. XIAMEN NIELL ELECTRONICS CO. LTD

Case No. SACV 13-0239 DOC (DFMx)

Central District of California

**October 2014 – March 2015: Expert Witness for the Plaintiff, Submission of a Report, and
deposed in March 2015**

2014

IN RE. CITYCENTER CONSTRUCTION AND LIEN MASTER LITIGATION

Master Case No: A-09-605103-C

PERINI SUBGROUP

Case No. A-10-612676-B

United States District Court, Clark County, Nevada

October 2013 - June 2014: Designated as a Rebuttal Expert Witness for Perini Subgroup, deposed in June 2014.

FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES, a Florida State Agency v. FLORIDA NATIONAL UNIVERSITY, INC., d/b/a FLORIDA NATIONAL UNIVERSITY ONLINE LEARNING CAMPUS, a Florida Corporation

United States District Court for the Southern District of Florida

Case No. 1:13-ev-21604

April - June 2014: Designated as a Rebuttal Expert Witness for the Defendant; submitted Expert Report; deposed June 2014.

INVISIBLE FENCE, INC., v. FIDO'S FENCES, INC,

United States District Court, Eastern District of Tennessee, Knoxville Division

Case No. 3:09-cv-00025

January 2014 – February 2014: Trial Testimony, Expert Witness for the Plaintiff, submitted an Expert Report, deposed.

PODS ENTERPRISES, INC., v. U-HAUL INTERNATIONAL, INC.

United States District Court, Middle District of Florida, Tampa Division

Case No. 8:12-cv-01479-JDW-MAP

January 2014: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed, and Trial Testimony.

2013

**T-MOBILE US, INC., T-MOBILE USA, INC. and DEUTSCHE TELEKOM AG,
v. AIO WIRELESS LLC**

United States District Court, Southern District Of Texas, Houston Division

Case No. 4:13-cv-2478

October 2013: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed

**EXCELLED SHEEPSKIN& LEATHER COAT CORP., v. OREGON BREWING
COMPANY,**

United States District Court, Southern District Of New York

Case No. 12 CV 1416 (GBD)

October 2013: Designated as an Expert Witness for Plaintiff; submitted Expert Report; deposed

THE CLOROX COMPANY, v. INDUSTRIAS ALEN, S.A. DE C.V, and ALEN USA, L.P.

United State District Court, Northern District of California, San Francisco Division

Case No. CV 12-01468-CRB

June - August 2013: Designated as an Expert Witness for Plaintiff; submitted Expert Report;
deposed

BEASTIE BOYS, ET. AL. v. MONSTER BEVERAGE CORP.

United States District Court for the Southern District of New York

12-Civ.-6065

August 2013: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed,
and Trial Testimony June 2014

SELECT COMFORT CORPORATION v. THE SLEEP BETTER STORE, LLC

Case No. 0:11-cv-00621

February – July 2013: Retained to provide an expert report for the Plaintiff; submitted Expert
Report

**MACY'S INC. and MACY'S MERCHANDISING GROUP, INC. v. MARTHA STEWART
LIVING OMNIMEDIA, INC.**

Supreme Court of the State of New York, County of New York

Index No. 650197/2012

May 2012 - April 2013: Designated as an Expert Witness for Defendant; submitted Expert
Report; deposed, trial testimony

2012

FLIR SYSTEMS, INC. v. SIERRA MEDIA, INC., and FLUKE CORPORATION

United States District Court, Oregon District Court

Case No. 3:10-cv-00971-HU

March 2012: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed

**YOUNGBLOOD TIMEPIECES, INC., v. FOSSILS, INC., MACY'S MERCHANDISING
GROUP, INC.**

United States District Court, Central District of California

Case No. CV 11-08175-SVW

May 2012: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed

VOLUMECCOMO APPAREL, INC. v. GUESS?, INC. et al.

United States District Court, California Central District Court

Case No. 2:11-cv-06694-RGK -RZ

June 2012: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed

ITT CORPORATION and XYLEM INC. v. XYLEM GROUP, LLC

United States District Court, Northern District of Georgia, Atlanta Division

Case No. 1:11 Civ. 3669-WSD

June 2012: Designated as an Expert Witness for Plaintiff; submitted Expert Report; deposed

LIFESCAN, INC. and JOHNSON & JOHNSON v. SHASTA TECHNOLOGIES, LLC et al.

United States District Court, Northern District of California, Oakland Division

Case No. CV-12-3630 (KAW)

December 2012: Designated as an Expert Witness for Plaintiff; submitted Expert Report; deposed

2011

CHRYSLER GROUP LLC v. MODA GROUP LLC et al.

United States District Court, Michigan Eastern District Court

Case No. 2:11-cv-11074-AJT-MJH

March 2011: Designated as an Expert Witness for Plaintiff; submitted Declaration; deposed;
trial testimony

FAIRFAX FINANCIAL HOLDINGS LTD. v. SAC CAPITAL MANAGEMENT LLC

Superior Court of New Jersey, Morris County (Morristown)

Case No. MRS-L-2032-06-4197

May 2011: Designated as an Expert Witness for Plaintiff; conducted research to support opinion;
submitted Expert Report; deposed

SALON FAD, et al. v. L'OREAL USA, INC., et al.

United States District Court, Southern District of New York

Case No. 10-cv-5063 (DLC)

June 2011: Designated as an Expert Witness for Defendant; conducted research to support opinion; submitted Expert Report; deposed

2010

**EQUAL EMPLOYMENT OPPORTUNITY COMMISSION v. ABERCROMBIE &
FITCH STORES, INC.**

United States District Court, Northern District of Oklahoma

Case No. 09-CV-602-GKF-FHM

December 2010: Designated as an Expert Witness for Defendant; submitted Expert Report; deposed; trial testimony

Exhibit C**SURVEY DEMOGRAPHIC OVERVIEW**

Indicate the category into which your age falls.	
n size	620
18 to 24 years	3%
25 to 34 years	16%
35 to 44 years	11%
45 to 54 years	19%
55 to 64 years	26%
65 or older	25%
Are you...?	
n size	620
Female	60%
Male	40%

Exhibit D

IMAGE: DOOR TO TH SAINT THOMAS OUTPATIENT NEUROSURGICAL CENTER

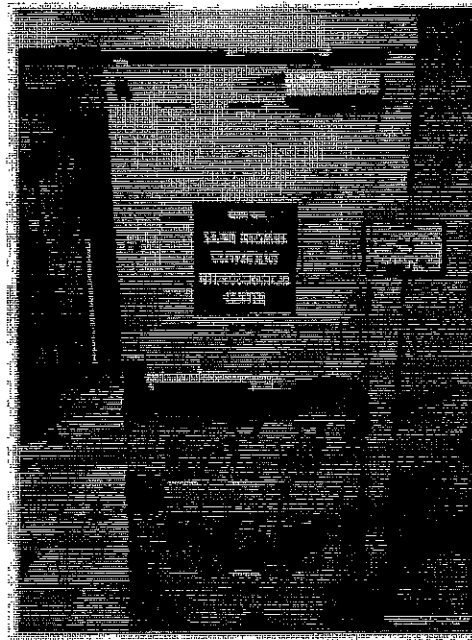


Exhibit E

STIMULI SHOWN TO RESPONDENTS IN QUESTION 1 OF THE ONLINE SURVEY

Test Group



Control Group



Exhibit F

QUESTION 1 OUTPUT

TEST GROUP Q1: Do you believe that this medical unit is part of any of the following healthcare providers?

n size 312

Saint Thomas Health 59%

Saint Thomas Hospital 60%

Saint Thomas Network 55%

Vanderbilt University Medical Center 1%

Vanderbilt Health One Hundred Oaks 2%

Nashville General Hospital at Meharry 1%

Not part of any of the above, but other provider(s): [OPEN ENDED] 0%

Not part of any 1%

Don't know/Not sure 6%

CONTROL GROUP Q1: Do you believe that this medical unit is part of any of the following healthcare providers?

n size 308

TriStar Health 61%

TriStar Horizon Medical Center 12%

TriStar Centennial Medical Center 17%

Vanderbilt University Medical Center 1%

Vanderbilt Health One Hundred Oaks 0%

Nashville General Hospital at Meharry 1%

Not part of any of the above, but other provider(s): [OPEN ENDED] 7%

Not part of any 4%

Don't know/Not sure 19%

Exhibit G

STIMULI SHOWN TO RESPONDENTS IN QUESTION 2 OF THE ONLINE SURVEY

<i>Test Group</i>	<i>Control Group 1</i>	<i>Control Group 2</i>	<i>Control Group 3</i>
<p><i>Group A</i></p> <p>Saint Thomas Health Saint Thomas Hospital Saint Thomas Network Saint Thomas Outpatient Neurosurgical Center</p>	<p><i>Group B</i></p> <p>Capella Healthcare St. Mary's Hospital Medical Center National Park Medical Center Southwestern Medical Center</p>	<p><i>Group C</i></p> <p>Holiday Inn Holiday Inn Express Holiday Inn Club Vacations Holiday Inn Resort</p>	<p><i>Group D</i></p> <p>Wyndham Vacations Ranchella Howard Johnson Super 8</p>

Exhibit H**QUESTION 2 OUTPUT**

GROUP A Q2: Please indicate on the scale provided below, how you perceive the connection between the following healthcare providers?

n size	157
They are all unrelated, independent entities	3%
They are relatively unrelated	4%
They are somehow related	21%
They are closely related and are part of one entity	72%

GROUP B Q2: Please indicate on the scale provided below, how you perceive the connection between the following healthcare providers?

n size	151
They are all unrelated, independent entities	71%
They are relatively unrelated	13%
They are somehow related	11%
They are closely related and are part of one entity	5%

GROUP C Q2: Please indicate on the scale provided below, how you perceive the connection between the following healthcare providers?

n size	157
They are all unrelated, independent entities	3%
They are relatively unrelated	2%
They are somehow related	20%
They are closely related and are part of one entity	76%

GROUP D Q2: Please indicate on the scale provided below, how you perceive the connection between the following healthcare providers?

n size	155
They are all unrelated, independent entities	25%
They are relatively unrelated	15%
They are somehow related	35%
They are closely related and are part of one entity	25%

Exhibit I

QUESTION 3 OUTPUT

	Saint Thomas Health	Saint Thomas Hospital	Saint Thomas Outpatient Neurosurgical Center	Saint Thomas Network	TriStar Health	TriStar Centennial Medical Center	TriStar Skyline Medical Center	Vanderbilt University Medical Center	Vanderbilt Health One Hundred Oaks
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Q8 provides high quality care	3,91	3,91	3,82	4,03	3,42	3,65	3,37	4,20	3,82
Q8 is trusted	3,89	3,88	3,74	4,00	3,45	3,68	3,39	4,14	3,81
Q8 is community-focused	3,76	3,82	3,49	3,78	3,39	3,47	3,30	3,96	3,63
Q8 is academic/ research-focused	3,30	3,37	3,28	3,25	3,11	3,18	2,93	4,33	3,57
Q8 is pleasant	3,74	3,67	3,48	3,90	3,41	3,68	3,34	3,83	3,54
Q8 represents Christian values	3,84	3,83	3,49	3,87	3,08	3,15	3,01	3,20	3,03
Q8 is large	3,97	3,91	3,43	4,18	3,52	3,75	3,39	4,40	3,84
Q8 is established	4,06	4,09	3,82	4,15	3,62	3,90	3,57	4,29	3,82
Q8 is family-focused	3,73	3,72	3,43	3,79	3,41	3,49	3,24	3,77	3,54
Q8 is reliable	3,90	3,78	3,65	3,93	3,39	3,66	3,37	4,09	3,76
Q8 provides education	3,31	3,45	3,26	3,51	3,12	3,35	3,12	4,23	3,30
Q8 is modern	3,79	3,73	3,55	3,91	3,39	3,74	3,52	3,99	3,75
Q8 is charitable	3,60	3,64	3,43	3,72	3,15	3,28	3,16	3,73	3,19
Q8 is safe	3,83	3,84	3,65	4,04	3,48	3,74	3,40	4,00	3,75

Exhibit J

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